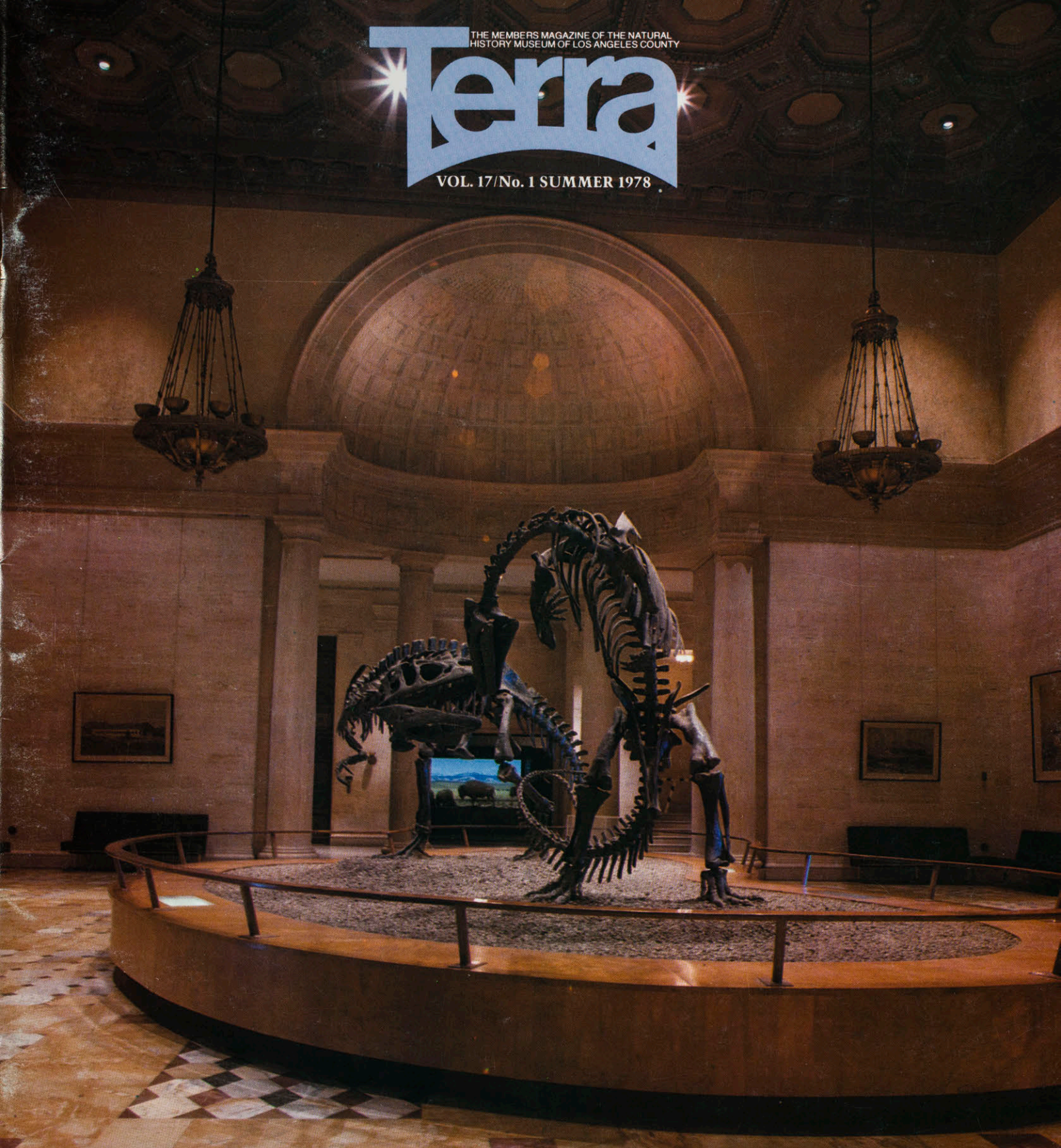
THE MEMBERS MAGAZINE OF THE NATURAL HISTORY MUSEUM OF LOS ANGELES COUNTY

Terra

VOL. 17/No. 1 SUMMER 1978



THE MUSEUM SPEAKS FOR ITSELF

A MESSAGE

TERRA readers through the years have learned about many activities intimately associated with our Natural History Museum: expeditions and laboratory research; educational programs of all sorts designed for many differing audiences; or accounts of peoples and places not well-known but familiar through study to our staff and associates.

This time TERRA is limited to the subject implicit in other issues but needful of restated emphasis: the Museum collections. It is the collection of objects that distinguishes museums such as ours from others. Our museums, together with the better universities, libraries, archives and similar entities, form a cultural fabric essential to the furtherance of civilization and nurturing of the intellect and the human spirit. The Museum's responsibility to that fabric involves the selective acquisition of objects, together with primary associated data; preservation and conservation; and the availability of all objects to serious interpretation, be it scholarly in the most specialized sense, or educational in the broadest.

Clearly it is the interpretational aspect of the Museum's function that is best known to the public, including many whose association with the Museum's activity, although frequent, has been superficial. The spectacular and esthetically exciting specimens dominate public thought. Those who genuinely understand the institution more intimately know where its true strength lies: with the millions of objects entrusted to it in perpetuity. The object is not only the original basis for interpretation but its monitor as well. The interpretive scenario may vary and can take a course that becomes a distorted or a questionable one. But the original object is truth, to be returned to when verification of interpretation is in order.

This issue is dedicated to these collections. It cannot be more than a brief account of them and must concentrate on those available for public view. Please be mindful that these exhibits are only the front gate to a vast estate that lies beyond.

Giles W. Mead
Director, National History
Museum of Los Angeles County
1970–1978

This issue of TERRA is dedicated to Dr. Giles W. Mead, under whose directorship the new North Wing and the George C. Page Museum of LaBrea Discoveries were built. His dedication and generosity have enriched the Museum and will be remembered.

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The Members Magazine of
THE NATURAL HISTORY
MUSEUM ALLIANCE
of Los Angeles County
VOL. 17/No. 1 SUMMER 1978

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The heart of the Natural History Museum is its collections. You, as members, are major contributors to the functioning and strength of that heart. It is hoped that you will read this issue with a degree of wonder at how much is on public display, and with fascination at what goes on behind the scenes. With TERRA in hand, we urge you to take a mini-tour of your Museum. The magazine has been designed to acquaint you with recent changes and exciting new halls to come.

The Aztec Sun Stone (or Calendar Stone) replica was made by David V. Villasenor from precise measurements he took from the original which is displayed in the Museo Nacional de Anthropologia in Mexico City. As such it is the only exact (life-size) copy of the original. It measures twelve feet in diameter, is made of fiberglass and weighs 600 pounds.

MAIN FLOOR

The Vertebrate Paleontology Section has one of the best curated large collections in the United States, due in part to a $445,000 National Science Foundation grant just completed. Without including the Rancho La Brea collections, we have the second largest catalogued fossil vertebrate collection in the country, and the third largest overall collection. We have the largest fossil and fish collection on the west coast, probably the second largest fossil marine mammal collection, and a sizeable fossil bird collection. We have 294 primary type specimens which are the permanent name bearers of newly described species.

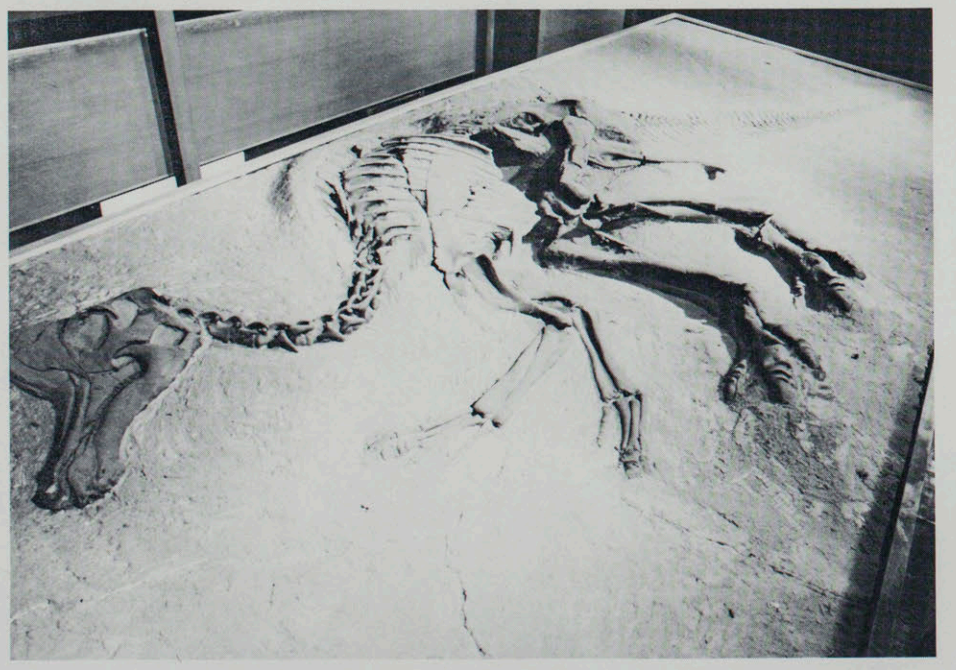
Members of the Section have coordinated and innovated environmental policy for the Museum and for planning departments of Los Angeles and adjacent counties, local cities, and state and federal agencies. We have recognized returns in the form of thousands of fossils that ordinarily would have been lost, and in the form of more progressive land use policy in our area. Our Museum is the official repository for some specimens found on land under the jurisdiction of several county, state, and Federal agencies.

The curatorial staff have made contributions in public relations, government planning, professional society activities, research and publication, exhibit planning, public speaking, curation and collections management (including computer programming), field work (including emergency salvage), and grant acquisition.

The staff is often requested to make specimens available to students and scientists from local institutions and from around the world. Specimens from the collection are used for display and education within the Museum.

The Section is supported by two Senior Museum Technicians and a laboratory supplied with machinery and various restoration and preservation materials. All the fossils used for study or exhibit pass through this laboratory for preparation. Our staff and associates currently are pursuing research on fossil land mammals and reptiles from the Mojave Desert, dinosaurs, fossil birds, fossil marine mammals, and fossil sharks and fishes.

Crested "Duck-Billed" Dinosaur—Corythosaurus. Toward the end of the Cretaceous Period, there flourished a group of large duck-billed plant eaters known as hadrosaurs. This nearly complete skeleton of the hadrosaur *Corythosaurus* (meaning "helmet-like lizard") was collected by the staff of the Royal Ontario Museum from late Cretaceous rocks of the Oldman Formation in Alberta, Canada. The tall, dome-like crest capping the skull contains air passages which may have aided breathing, improved the sense of smell, and been used for sound generation. On display in Hall of Evolving Life.



1 The "King" of Carnivorous Dinosaurs, Tyrannosaurus rex. This excellent skull of Tyrannosaurus rex ("tyrant lizard"), a fifty foot long, six ton carnivorous dinosaur, was collected by Museum vertebrate paleontologists. The first serious museum dinosaur collecting was during the middle 1960's when William T. Sesnon, Jr. supported a number of Museum expeditions to the Hell Creek Formation in eastern Montana. This skull and parts of its associated skeleton as well as several duck-billed dinosaurs and a nearly complete Triceratops (three-horned dinosaur) were found during these expeditions.

2 Giant Flightless Bird—Diatryma. On display in the Hildegarde Howard Cenozoic Hall, this extinct giant has no close living relative, though it is classed in the order that includes rails, trumpeters, and cranes. It is from the Eocene Age, found in Wyoming. A cast of the original.

3 Western Horse—Equus occidentalis. This skeleton, mounted with bones from Rancho La Brea, represents one of the last species of native North American horses. It is the culmination of a lineage of horse evolution demonstrated in the Hildegarde Howard Cenozoic Hall. Native horses became extinct in North America about 8,000 years ago. Horses were reintroduced by Europeans in the 15th century.

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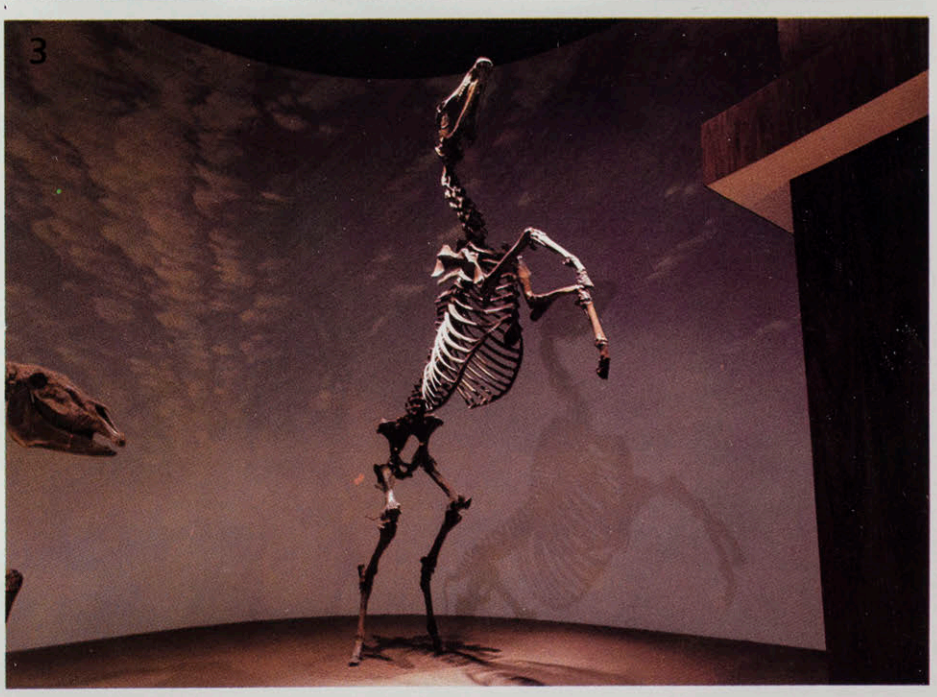

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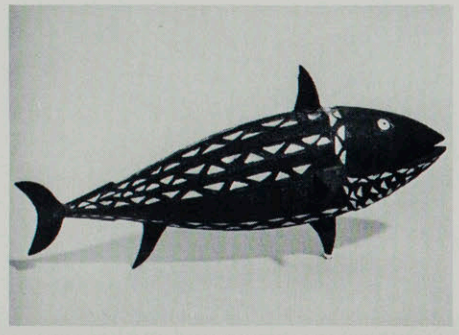
MAIN FLOOR

One of the important Museum anthropological collections came about as a direct result of World War II. Increased Western contact with the area of Oceania brought many artifacts from the South Pacific to the Museum. New Guinea ritual art from the Sepik and Maprik areas forms the bulk of our Melanesian collection. Notable pieces such as elaborately carved posts from men's ceremonial houses that tell us much about the ritual life are well represented in our recently refurbished Hall of South Pacific Culture. Inlaid with cowrie shells and adorned with feathers, these posts are extremely fragile. If left exposed in the tropical climate of New Guinea, such pieces quickly would perish and the record of their existence would be lost for future generations.

The Stone Age culture of Australian Aborigines has changed rapidly in this century. Our collection of approximately a thousand specimens documented this simple existence while it still existed. Two areas of particular significance are the extremely rare ceremonial churingas or sacred message boards, and bark paintings documenting the work of some of the best aboriginal artists.

Canoe model. Carved of wood by Wiheu Terahi, a famous Maori craftsman, this model depicts the large war canoes used by the Maori in historic times. Typical of such canoes were the intricately carved prow and stern pieces. On display.

Fishing effigy. This carved wooden figure of a Bonito inlayed with shell was used by the people of Guadalcanal, Solomon Islands, to insure catches by creating fishing magic. On display.



Ancestor figures. Ancestor worship in New Guinea was highly developed among the tribes along the Sepik River. These figures represent mythological beings, as well as ancestors, whose spirits possessed supernatural powers. Maprik culture. On display.

4 Double-ended Micronesian outrigger canoe made in Palau. Made from a single breadfruit log, the full-size outrigger, the newest addition to the Museum's Micronesian collection, has a woven pandanus leaf sail and is painted a bright, glossy red, the characteristic canoe color made by mixing red minerals with fish oils. This outrigger forms the nucleus of our display illustrating the fishing techniques and navigational art of Micronesian natives.

5 American Bison—Bison bison. A herd of bison graze on grasslands by the Big Horn Mountains of north central Wyoming in October. Sixty million bison roamed the plains over all the United States, but by 1889 there were only about one thousand left because of indiscriminate slaughter. Now they survive in a few private and government herds. Hall of North American Mammals.

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Wall of the Pre-Columbian Hall devoted to the outstanding material from the Veracruz area, Mexico.

The Archeology Section has been actively involved in the investigation of the prehistoric peoples of the islands off the coast of southern California. Site surveys and excavations have been conducted on all but two of the islands, resulting in highly significant and valuable documented collections available for special displays and research.

In the course of the work much important information has been recorded and analyses of the findings have provided insight into the ways of life of the ancient island inhabitants and how these have varied through time. In addition to information of a cultural nature, excavated faunal refuse materials have revealed important biological data concerning the occurrences of the biota and the changes that have occurred.

MAIN FLOOR

The dramatic display above is but one section of the large Pre-Columbian Hall, which presents cultural patterns of the various regions of high civilizations in such a way that the cultures of each stand out on their own, and in so doing, trace the history of many peoples as their civilizations began, flourished and declined.

When one has completed a tour of the Hall one will know something of Middle American culture from its beginnings, when Indians ceased to be nomadic hunters and discovered agriculture, to its death in 1521 with the completion of the Spanish conquest by Cortés. Visitors are able to examine the material qualitatively, for there are splendid examples of each of the periods.

Toltec incense burner, A.D. 1100–1300. The hourglass-shaped incense burner has mounted on one side the figure of a priest wearing a bird headdress and engaged in an autosacrificial rite. The figure was found in the Veracruz area of Mexico. On display.

Nayarit hollow clay figure 200 B.C.-A.D. 400. This standing figure is a fine example of the style of the people of Nayarit state, Mexico, during Preclassic times. Polychrome painting on the skirt and body plus the ear and nose ornaments are typical. On display.

6 **Tairona Gold Pendant, A.D. 1000.** **A large pendant representing a diety wearing ear plugs, nose ornament and headdress with four birds' heads, is an outstanding example of Pre-Columbian goldwork from the Tairona Culture of Colombia, South America. Though one of the least known of the ancient peoples, the Tairona were superior in their intricate workings of gold. From their central region in the northeast Sierra Nevada part of Colombia has come a significant number of small gold ornaments such as bells, nose rings and beads. Rare finds, however, have been made of larger and more complex forms such as the example in the Museum's collections.**

7 **Mayan pyramid mural.** **Dominating the entrance to the Pre-Columbian Hall is this mural depicting a pyramid from the great Mayan center of Tikal. Painted by Mary Butler and her assistants of the Exhibition Section.**

8 **Complete contents of a West Mexican tomb. 200 B.C.–A.D. 400.** **Considerable numbers of shaft tombs have been located and excavated by local farmers of the west Mexican states of Nayarit, Jalisco and Colima, but little information was preserved regarding their total contents. Fortunately, one tomb was found undisturbed because dirt had filled the chamber subsequent to its closing, so that all items could be gathered quickly and easily. As a result, many small carved things made of stone, shell and bone were recovered along with the larger clay figurines and vessels. This total group of tomb objects from the region of Etzatlan, Jalisco, has become a part of the Museum's collections, affording an opportunity to have on display a reconstruction of their arrangement and associations.**

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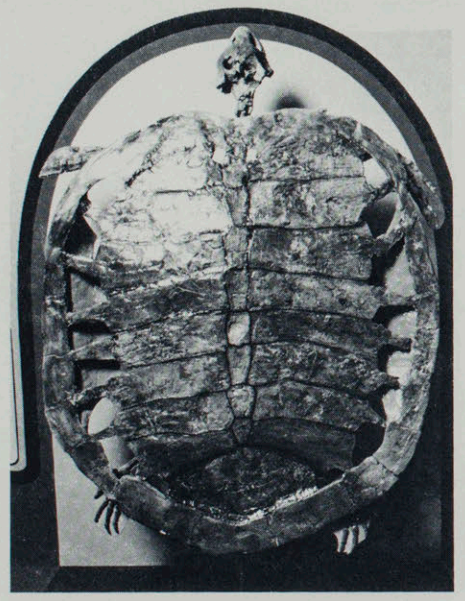
MAIN FLOOR & MEZZANINE

No backbone? No matter, such animals have high priority at the Museum. Invertebrate Paleontology exhibits stunning specimens such as those pictured, and also has a collection rated among the top nine in North America. The collection includes the world's largest collection of marine invertebrate fossils from the Pleistocene (Ice Age) in California and Oregon, the world's largest collection of fossil insects, spiders, and other invertebrates from Oligocene rocks in the Rhineland, the world's largest collection of Permian age corals from California and Nevada, and western North America's largest and most comprehensive display collection of representative, unusual, and rare invertebrate fossils from eleven phyla.

Staff field trips pursue various research interests, studying and collecting specimens for the Museum collection. There is not enough display space to show adequate specimens from the important phyla Mollusca, Arthropoda, and Echinodermata.

Field trips can have spectacular practical application, such as the discovery that the presence of one fossil clam of Miocene age in Baja California Sur could be used to trace a layer of phosphate in many areas of the state, thus avoiding the necessity of trucking phosphate from other known deposits over the mountains. This one fossil clam also may be an index fossil to uranium deposits.

The ARCO Plaza excavation monolith, 5,000 lbs. of Pliocene age fossil-studded rock from underneath downtown Los Angeles. On display.

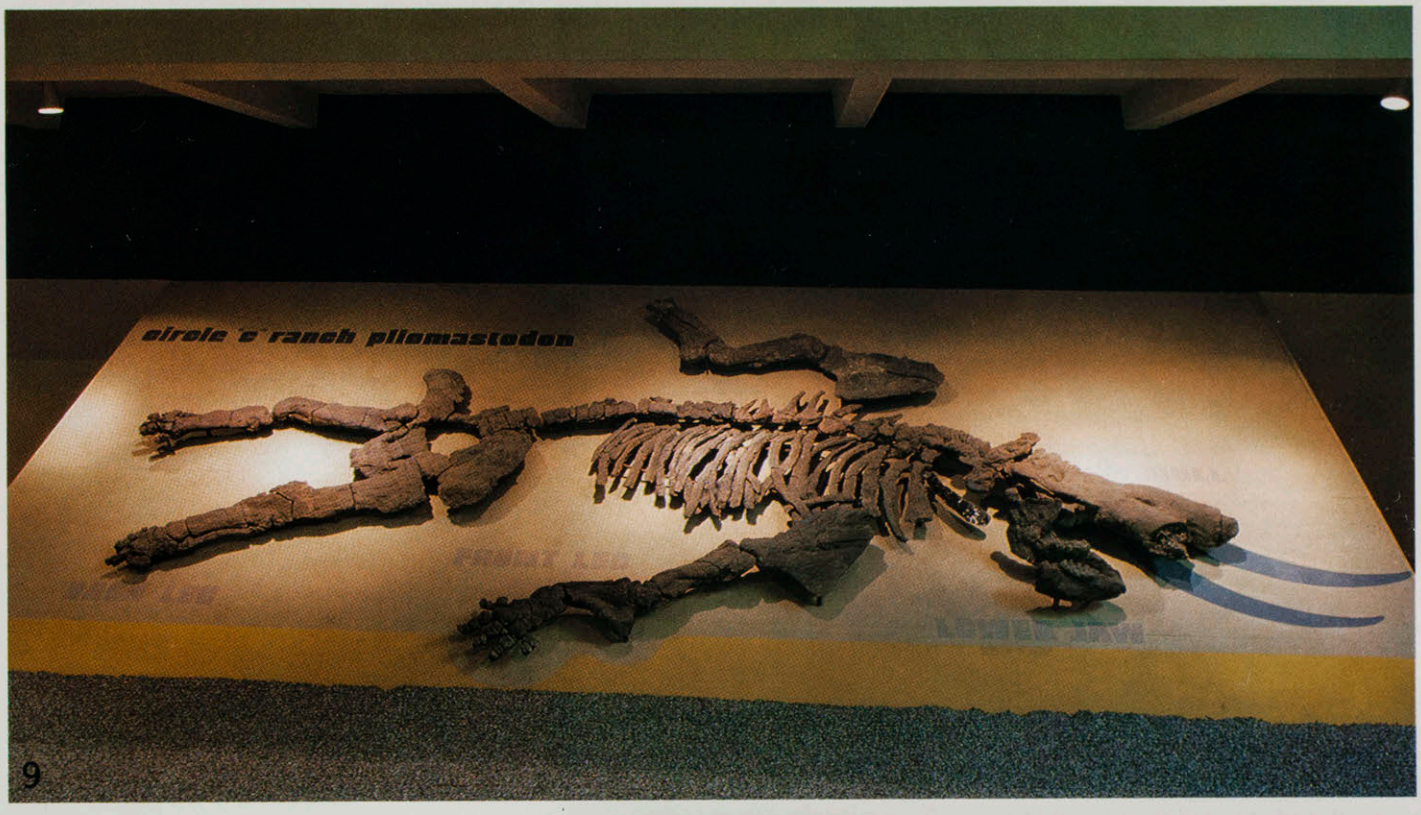


Marine turtle from Kansas—Toxochelys latiremis. Turtles are considered by many to be the most primitive living reptiles. Turtles originated on land during Triassic times, but it was many millions of years later in the Cretaceous that they successfully invaded the sea. *Toxochelys* was one of the first to live in the sea, and became extinct in Paleocene time (60 to 65 million years) shortly after the dinosaurs disappeared. This unusually complete specimen was collected from rocks of Cretaceous age in Kansas. On display on the mezzanine.

9 **Pliomastodon from Circle "C" Ranch.** **This skeleton, somewhat compressed by the weight of sediments in which it was buried, is displayed nearly in the position in which it was found. Found in 1965 on the ranch of Mr. Phil C. Smith near Beaumont, California, this Pliocene ancestor of the Ice Age Mastodons was collected by Museum staff.**

10 **Trilobites—Homotelus bromidensis. Trilobites are extinct marine animals that swam, crawled, and dug in crab-like fashion in the seas of the Paleozoic Era from 225 to 570 million years ago. This stony slab shows fifty trilobites huddled together in a mass death, possibly quietly asphyxiated by red tide conditions during Middle Ordovician time 470 million years ago, on the sea bottom at a place destined to be called Oklahoma.**

11 **Fossil ammonite—Pachydiscus catarinae. Large ammonites occur in some rock formations of the late Cretaceous age, 65 or more million years ago. They are an extinct kind of marine mollusk, somewhat akin to the living chambered nautilus. This 22-inch wide ammonite was found in 1975 on a beach at Point Loma in San Diego. A helicopter was needed to hoist it, over 500 lbs. in weight, to the truck which brought it to the Museum.**



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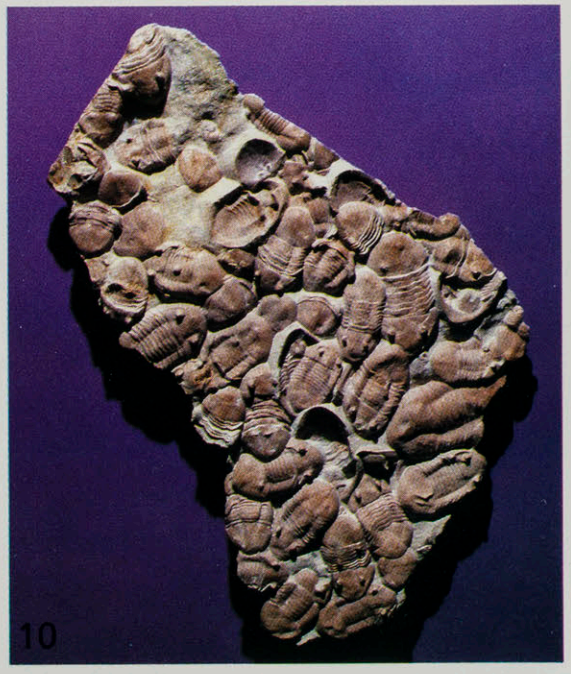
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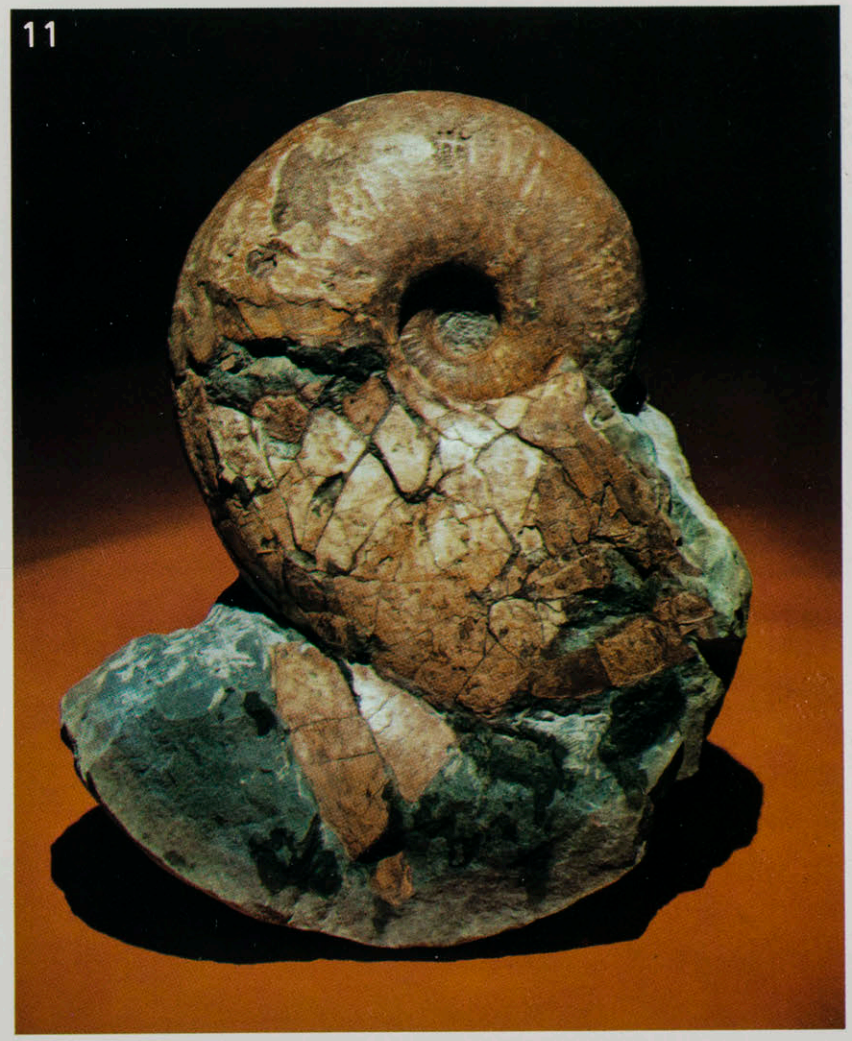
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MAIN FLOOR & MEZZANINE

The Entomology Section has an enormous reference collection in general, but, most appropriately, of the southwestern United States. Entomologists using our collection are able to make authoritative identifications and discover facts which are of direct application to problems in public health and medical syndromes associated with insects, agriculture, horticulture, water quality, conservation of natural resources, and countless other practical aspects of public need.

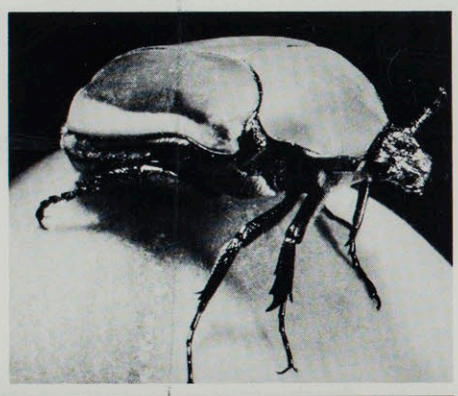
The academic arena is also served by this collection, in which are recognized applications to nature appreciation, ethnoentomology, origin and history of California insects, and much else.

Voucher specimens of rare, extinct, and endangered insects are an important part of the collection. We possess specimens of many such forms (Xerces Blue, El Segundo Blue, Lange's Metalmark) which are of value to academic studies such as filling gaps in phylogenetic reconstructions, but more practically in focusing attention on the habitat destruction which threatens man's quality of life and perhaps his existence. One species of California sand dune cricket became extinct before it was discovered and named—in the Museum collection.

Staff projects are varied. A manuscript has just been completed for the University of California Press Natural History Guidebook Series on California Insects. A field trip to Costa Rica added over 52,000 specimens to the collection from a doomed rain forest area. The Bureau of Land Management is sponsoring a Museum study of the ants of the California deserts, to determine what ant species occur in our deserts, where they occur, and what impact man's activities may have on their existence. Ants are a dominant element in desert ecology (as well as in picnics); they are both predators and a food resource.

Only a fraction of the Entomology Section's specimens are exhibited in the Insect Hall, but there they are organized in a clear and comprehensive manner so that the visitor may learn principles about the insect world as well as enjoying the beauty of, and information about, each species.

Fig Beetle (Cotinus Texana). On display.



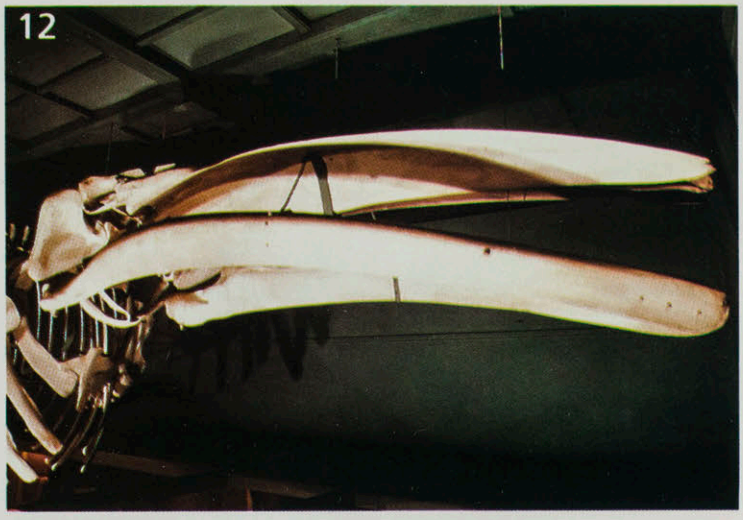
Goliath Beetle (Goliathus goliathus). From Central Africa. On display.

El Segundo Blue butterflies. With a wingspan of only 20mm (¾"), the El Segundo Blue has recently gained notoriety as one of six butterflies to be declared endangered species. On the uppersides, males are blue and females are brown, while both sexes share similar markings on the underside. The adult butterflies (with the awesome name of *Shijimiaeoides battoides allyni*), are only on the wing in July and August on about 250 acres of the El Segundo Sand Dunes.

12 **Fin Whale—Balaenoptera borealis.** **This unusual mounted skeleton is of a 70 foot, 60 ton adult female that was harpooned in 1926 off the northern California coast. The skeleton was collected at the Trinidad Whaling Station of the Pacific Sea Food Products Company in Humboldt County by Dr. Howard R. Hill and Eugene J. Fischer of the Museum. In life, baleen hung from the margins of the snout and was used to capture food. Hall of Evolving Life.**

13 **The Panoche Hills Plesiosaur, Morenosaurus.** **This skeleton of Morenosaurus stocki is an excellent example of a long-necked marine reptile known as a plesiosaur. A 1940 California Institute of Technology expedition collecting in the Upper Cretaceous age rocks (65–70 million years old) of the San Joaquin Valley in California, discovered this outstanding specimen which is on display in the Hall of Evolving Life. Small gizzard stones known as "gastroliths" are preserved within the body cavity.**

14 **Insect Hall.** **The Insect Hall at the Natural History Museum is unique in craftsmanship and content. Over a decade in construction, the Hall combines the efforts of Museum entomologists and exhibition staff into a teaching display of the varied and fascinating aspects of insect life. Generous use of highly accurate models compensates for the smallness of most insects.**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MAIN FLOOR

The Mammalogy Section has multitudinous functions, but perhaps the most visible are the habitat groups, in four halls of North American, African, and Exotic Mammals. These halls are among the most consistently popular. Walking through darkened corridors, visitors gaze at and are drawn into the well-lighted life-like scenes of animals in their natural environments, accurate as to season, foliage, bird and insect life, reptiles, all the thousands of aspects which make any moment of animal life, or our life, seem real. Creating realistic habitat groups is an expert and time-consuming task. Preparators in the Habitats Section must create a three-dimensional background, collect appropriate plant and rock material, and above all, with the help of Curatorial staff, prepare the animal exhibits so that they are scientifically accurate. In the Bison Habitat (see page 5) look especially at the leaves, bark, and water in the stream; these are all perhaps not central to the visitor's eye, yet each aspect is precisely modelled from its original.

Yet museums are not just for show; just as important as the public face of the habitat groups are the Museum's collections and the library. The mammal collection is extensive; the marine mammal collection is one of the largest in the world. The mammalogy library is large, including old and rare publications.

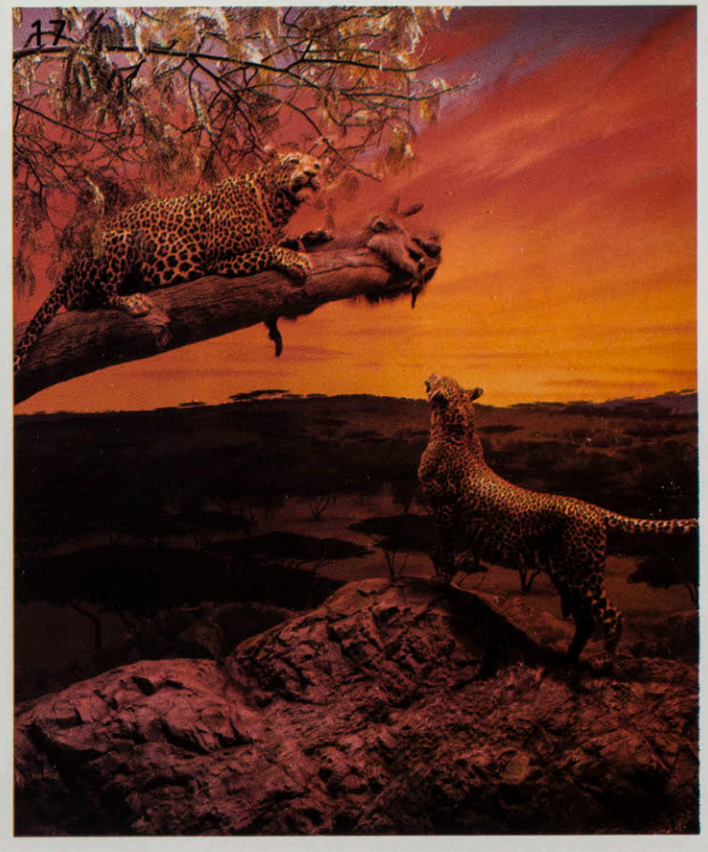
Mammalogy does broad research on all kinds of mammal subjects. A few of the projects, most of which require much travel and field research, are: taxonomy and distribution of mammals of the Mexican states of Colima and Zacatecas, of bats of Uganda, of mammals of South West Africa, and of kangaroo rats in Southern California; in Marine Mammal research, aboriginal hunting of whales by Eskimos of Alaska and Greenland; survey and salvage of stranded marine mammals in Los Angeles County and adjacent areas; census of Gray Whale migration through the Catalina Channel; studies on behavior and anatomy of the Gray Whale; systematics and zoogeography of pilot whales.

The department is also active in conservation activities. Some concerns are incidental killing of pilot whales by commercial and sport-fishing operations, status of Tule elk in California, and census and status of Bighorn sheep in the San Gabriel and San Bernardino Mountains.

15 **Elephants—Loxodonta africana.** **Near the Tana River in Kenya, a herd of African elephants gather by a water hole on a March morning. This herd consists of one large male, two adult females, an infant, and a young male. The large female toward the back is chewing a Sansevieria plant. Giraffes—Giraffa camelopardalis—often congregate around water holes with elephants and other animals such as zebra. Also seen are Vulturine Guinea Fowl, Black-faced Sandgrouse, and Chestnut-bellied Sandgrouse. The African elephant is the largest living land animal, the giraffe is the tallest. Elephants adapt to various habitats—thorn tree, bunch grass, shrubby thicket, forest—but they are diminishing in almost all of their native habitats due to hunting, poaching, and habitat destruction.**

16 **Bongo.—Boocercus euryceros.** **Bongos are elusive forest antelopes living in the bamboo forest belt stretching across Africa, but survive in pockets of deep forest only. This scene shows a lone male in the Aberdare Forests of central Kenya.**

17 **Leopard.—Panthera pardus.** **At sunset in northern Kenya a male leopard keeps watch over a sill (a baboon), while the female leopard stands below. Leopard habitat covers a huge range, from Africa and the Middle East throughout Asia; they live in a wide variety of habitats; because of hunting and habitat destruction, however, their range and their numbers have shrunk.**



MAIN FLOOR

The History Division encompasses several halls and an important archives collection. The gallery, The American: This New Man, focuses on American history up to 1815; The Garland Hall covers our country's history from 1865–1914; in 1979 the Lando Hall is scheduled to open, its subject California and the American Southwest, 1540–1940. The Art of the Automobile, exhibiting outstanding early cars, is an always-popular gallery. *Este Ameno Paraje,* California during the American Revolution, and Pacific Frontiers, which deals with United States involvement and influence in the Pacific Basin in the 19th century, are temporary halls of great interest.

The American: This New Man is a gallery concentrating on early American History to 1815. In the late 1700s a Frenchman living in the New World, J. Hector St. John de Crevecoeur, asked the question, "What then is the American, this new man?" Crevecoeur farmed in upper New York, tried to understand his neighbors in the new land, and wrote about the people he observed.

Life in the New World certainly differed from that of Europe, though most of the settlers were from there. The vastness of the North American continent, the distance from Europe, and the struggle for control of the land with Indians and rival European powers led to situations for which there were few precedents. Attitudes of personal self-reliance and political independence developed here as a partial answer to the new situations. After the War for Independence, which was probably inevitable, the new nation was faced with new realities: success and growth would largely depend on forces and personalities in America that helped create "The American, This New Man."

The United States survived and prospered because the people developed those characteristics which have become synonymous with the American way of life: individualism, self-reliance, initiative, cooperation, and confidence.

French Musket from the mid-1700's. This musket was found on a Revolutionary War battle site. France was the largest foreign supplier of arms to the Colonials. The musket, now restored, is one of several hundred exhibited items from the Museum's massive weapons collection. In the same gallery are a Brown Bess musket, several swords of John Paul Jones, and many significant weapons of the 1700's.

The Garland Hall focuses on American History, 1865–1914. At the end of the Civil War a great surge of technological activity transformed American agriculture, industry, transportation, and communications. By the last quarter of the nineteenth century the major American industries—steel, oil, meat-packing, grain-milling, mining—began to develop on a national scale.

Railroads were a major economic stimulant and unifying force of the period. Between 1865 and 1914 a huge rail network reached into every corner of the nation. The first transcontinental railroad was completed in 1869, and by the turn of the century five transcontinental railways were in operation.

Still, there were signs of discontent. Labor struggled for higher wages, safer working conditions, and recognition of the right to organize into unions. Both the size and number of urban centers grew rapidly, as citizens welcomed foreign immigrants and dissatisfied American farmers looking for better opportunities. It was undoubtedly an era of wealth and ostentation, yet multitudes lived in extreme poverty, and ugly examples of racial and religious intolerance made life miserable for whole classes of people.

The social fabric of the nation was changing. Tax-supported schools were built in every part of the country. Compulsory education laws became the rule, as children were required to attend until their teens. Women demanded—and often got—the right to vote and hold political office. Many Americans took a new interest in the arts, literature, and science.

In relations with other countries the United States continued its traditional policy of isolation by avoiding alliances and discouraging European powers from meddling in the Western Hemisphere. On the other hand, the very domestic growth which originally distracted Americans from an interest in foreign affairs eventually led the nation to begin looking outward. By the turn of the century the United States was becoming a world power.

In 1890 the Census Bureau discovered that the frontier stage of the westward movement was rapidly drawing to a close. In the few short decades following the Civil War, prairie farmers, cowboys, miners, and Indian fighters had transformed the West in a manner that challenged the imagination of Americans. Some thought it was the end of an era, others the time for a new beginning.

A section of the Garland Hall.

18 Colonial Kitchen. **The kitchen in the colonial American home served the purposes of a modern family room, workshop, and kitchen combined. Multiple use of tools and furnishings was the rule; the fireplace served as the heat source and cooking area of the home. In front of the hearth, the principal activities of the home took place: cooking, weaving, sewing, and minding the children. Materials from the collections are placed in this model architectural setting of a rural or frontier colonial house. The American: This New Man Hall.**

19 Thomas Jefferson's Clothing. **The costume, which came to the Museum indirectly from the Jefferson family, shows Jefferson to have been an unusually tall man; it is a fine example of the casual clothing worn by a reasonably prosperous planter in the early years of the nineteenth century.**

20 1889 Streetcar. **Displayed in the Garland Hall of American History, although its restoration is not yet complete, this streetcar is the sole surviving example of the first self-propelled electric cars used in Los Angeles. It was originally operated by the Los Angeles Electric Rapid Transit Company, but when it came to us, it had been used for years as a work car on the Pacific Electric.**

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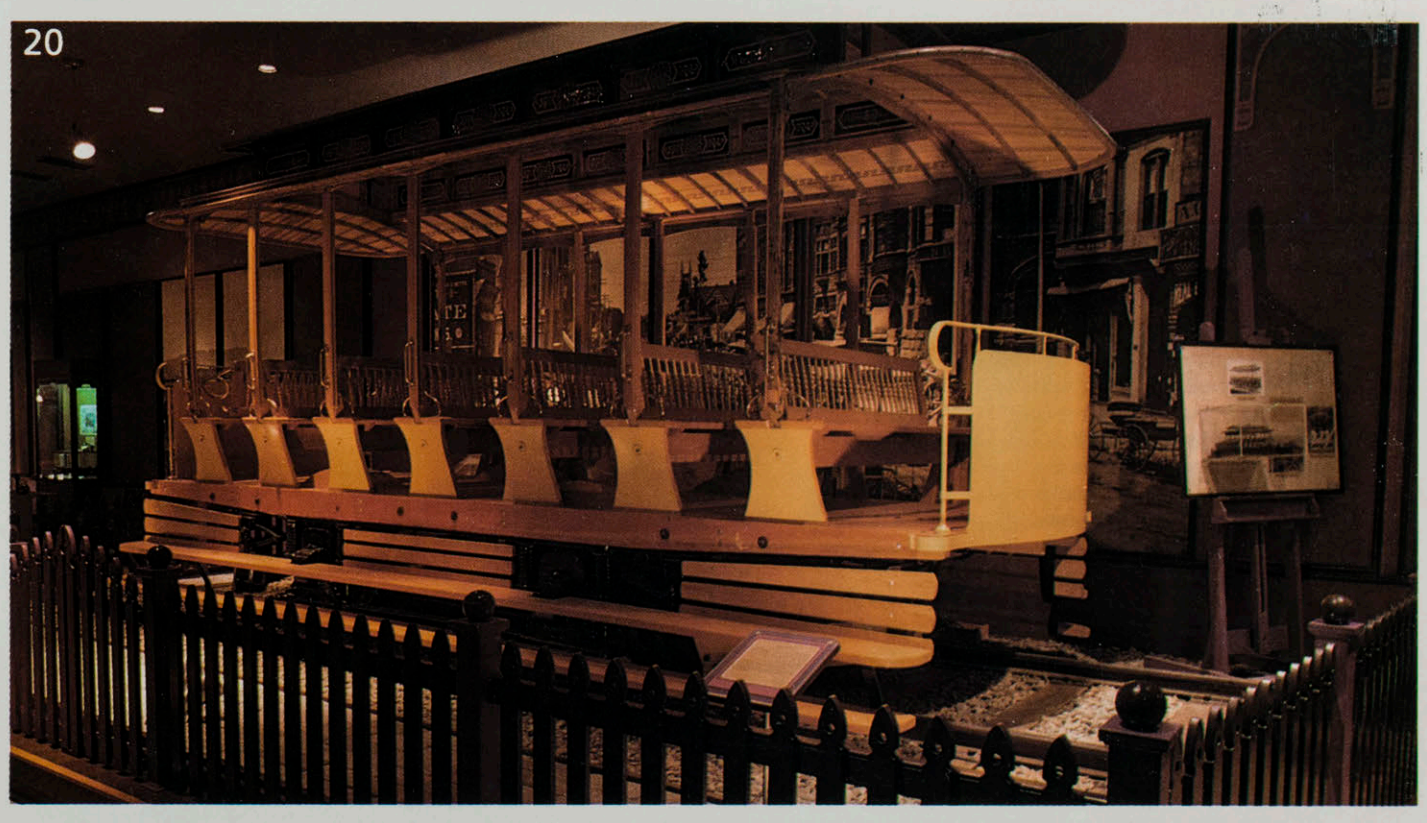

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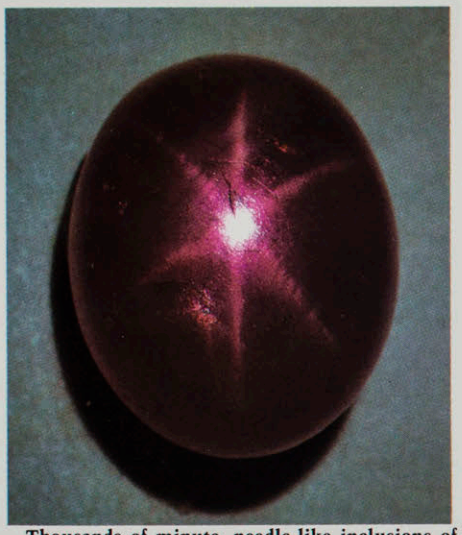
MAIN FLOOR

The Museum is justifiably proud of the new E. Hadley Stuart Hall of Gems and Minerals. The goal of the Hall is to promote a better understanding of the basic principles of mineralogy and to present the variety and beauty of gems and minerals in an intimate atmosphere of simple elegance. The educational exhibits in the Stuart Hall provide a graphic introduction to the principles of mineralogy. Glimpses at mineral formation, atomic structure, crystal growth, symmetry, pseudomorphism (the replacement of one mineral by another), and the various physical properties—color, luster, transparency, hardness—are all aimed at providing an insight into the fascinating world of minerals. The entire central portion of the Hall is occupied by a collection of exceptionally fine mineral specimens. These mineral classics are highlights of the entire mineral exhibit. The "work horse" of the Hall is the 60-feet-long systematic mineralogical wall explaining the classification of minerals by their chemistry. A special vault has been built into the Hall to display the magnificent gem collection of the late Colonel Frederick C. Hixon. The collection serves a dual purpose. First, visitors have an opportunity to learn and appreciate the great variety and beauty of gems and minerals. The second, and perhaps more important function of the collection, is that it is designed to be a working collection, dedicated as a research vehicle for interested and qualified gemologists. A secure, well-equipped laboratory occupies the mezzanine above the gem vault, and guarantees that the Museum itself will be a dynamic teaching institution in gemology.



Thousands of minute, needle-like inclusions of rutile, arranged in a definite pattern, give this 18.29 ct. Burma ruby its "asterism" or star. Star rubies of this size and color are exceedingly rare.

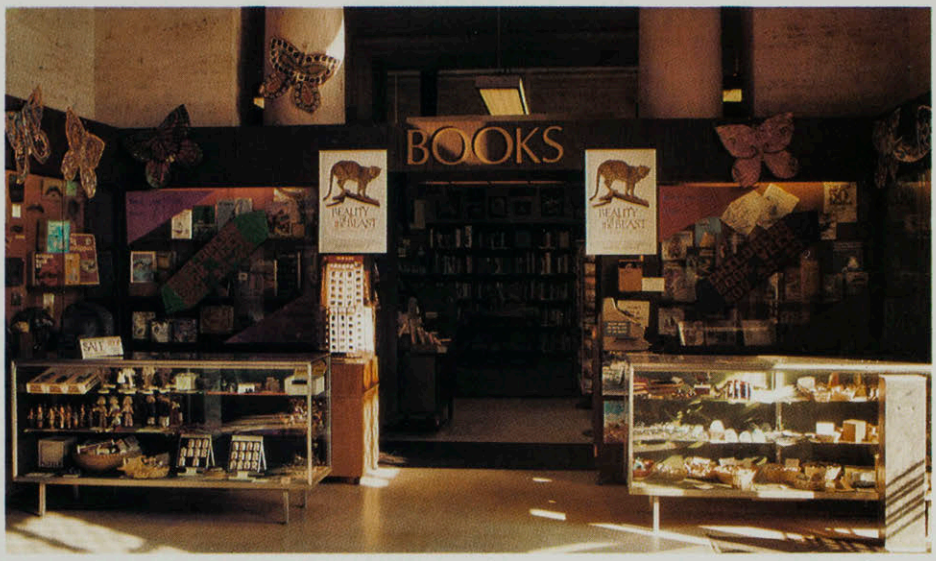
Exceptional material not on display includes the Call Collection of Carved Jade. The collection has many significant pieces and it is hoped that there will be room soon to display it. Another important collection not on display is the Blasco Collection of Synthetic Gems. The new gem exhibit excludes synthetics due to lack of space, yet synthetics are increasingly important to the Jewelry trade. The Mineralogy/Geology Section has received a large donation to make documentary films on gem production in the Americas. The films, to be shown on PBS television and distributed to libraries and schools, will involve the formations, occurrences, and mining operations of gem stones.

"Gold Rush", is the title of the exhibit in the Stuart Hall which is devoted to the display of artifacts related to California gold mining history and to the gold itself, in all its beautiful natural forms. The exhibit is filled with gold nuggets, gold crystals, gold leaves, gold wire—all just as they were found in nature and extracted by gold miners through the years.

This elbaite (tourmaline) on quartz from the Cruziero Mine, Minas Gerais, Brazil, is remarkable for the size and perfection of the large elbaite crystal but even more so for its striking aesthetic composition.

21 A view of the E. Hadley Stuart Hall of Gems and Minerals looking west through the elegant parallelogram cases which house the "classics," or exceptionally fine mineral specimens.

MUSEUM SHOPS



ETHNIC ARTS SHOP (at the north entrance) Museum of Natural History/900 Exposition Blvd./Los Angeles, Calif. 90007.

The Ethnic Arts Shop offers distinctive, high-quality arts and crafts from around the world. Available in the shop are such diverse items as ceremonial sculpture from West Africa, beautiful amber jewelry from Scandinavia, and handwoven tapestries from Mexico, Ecuador, and Peru. Also for sale are authenticated antiquities, and a variety of colorful ethnic clothing including Chinese hand-embroidered silk robes.

As well as co-ordinating its merchandise with current Museum exhibits, the Ethnic Arts Shop also creates exciting and successful activities on its own throughout the year. Most notable of these is the annual American Indian Artistry Exhibit and Sale in December. The show offers booksignings, films, lectures, demonstrating craftspeople, traditional dance performances and an expanded selection of old and contemporary North American Indian arts and crafts.

BOOK SHOP (at the south entrance) Museum of Natural History/900 Exposition Blvd./Los Angeles, Calif. 90007

The Book Shop carries an up-to-date assortment of titles in all areas of natural history and is willing to special order any requests not already on the shelves. Recently, the shop has become quite well-known for its thorough Pre-Columbian section and for its fine selection of specialized museum publications. Also offered for sale are wildlife notes and cards, as well as a series of postcards which feature museum exhibits. For children, the Book Shop has a variety of educational books, coloring books, puzzles, kits, model and toys.

PAGE MUSEUM SHOP (at the entrance) George C. Page Museum of La Brea Discoveries/5801 Wilshire Blvd./Los Angeles, Calif. 90036

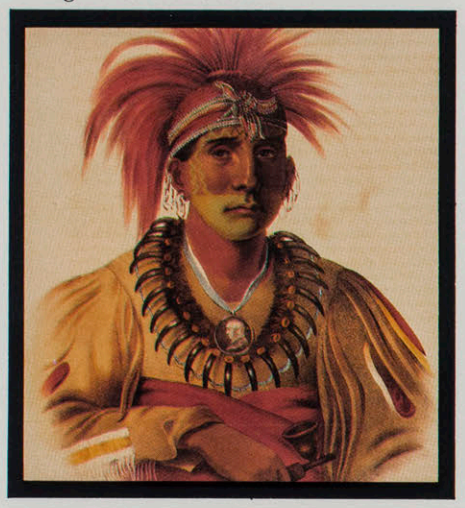
The Page Museum Shop offers a wide range of educational items for children as well as a carefully selected book section with the latest in interesting and informative natural history titles for all ages. For the discriminating shopper, jewelry, sculpture, exotic plants, and quality gift items are available. The focus in this museum is on animals, so the shop responds by offering a collection of animals in all shapes and sizes. For example, there are sleek, hand-carved ironwood animals made by the Seri Indians on the west coast of Mexico, animals made in the People's Republic of China from bamboo and lacquer, and animals etched into handcut crystal from Sweden.

The profits from all three shops go toward the general betterment of the Museum.

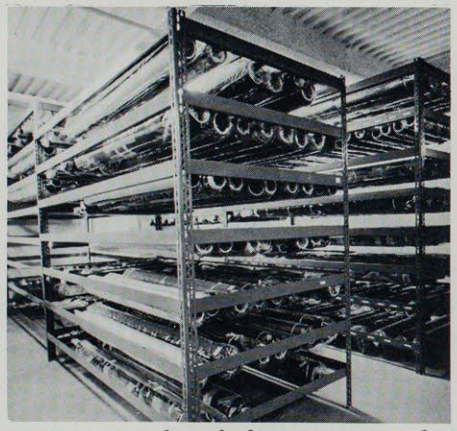
GROUND FLOOR

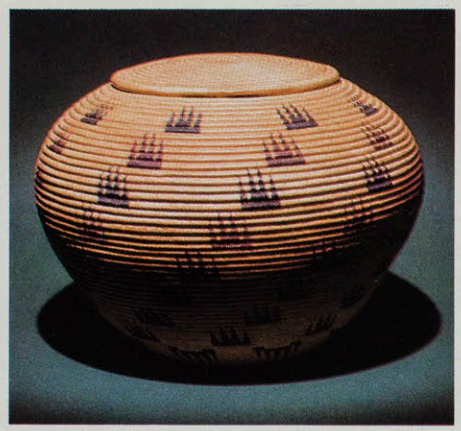
The Hall of Western American Indians is the oldest and most popular exhibit area in the Museum. The Hall contains material culture exhibits of California, Northwest Coast, Northern AthaPas-Kan, Eskimo, and Southwest Indians. Although the exhibits center around cultural aspects, the non-material phases of the cultures are represented by dioramas, drawings, paintings, and photographs. The Indians of Western America represent an important cultural and historical contribution to the present population of California, and in the near future an extensive renovation of the Hall is planned, which will incorporate many items of Indian culture which have been acquired by the Museum in recent years.

The Plains Indian Hall is directly adjacent to the Hall of Western American Indians and represents a segment of American Indian life which, for most people, is the best known of all the native American cultures. The Plains tribes lived in the grassy, fertile belt which extends a thousand miles north to south and occupies the space between the Rocky Mountains on the west and the Mississippi River on the east. This placed them directly in the way of westward expansion in the middle nineteenth century. Their active, colorful and warlike way of life is depicted in the Hall, which has many fine examples of the costumes and decorative arts of these people.



Rare book. This book with hand-colored lithographic portraits of North American Indians is but one of the many important works of the Museum Library's collection. *History of the Indian Tribes of North America with Biographical Sketches and Anecdotes of the Principal Chiefs...*, by M'Kenny, Thomas and James Hall, is a three-volume, folio-sized work published 1837–1844. Illustrated is an example of the beautiful color lithography in this book.





Basket, 1915, by famed Washo weaver, Dat-so-la-lee. *This first of her lidded baskets is on display on the Main Floor near the elevators.*

Although the storerooms of Anthropology are not seen by the general public on a regular basis, they contain the bulk of our important collections. This material is carefully archived and protected from such destructive agents as insects, mold, mildew, harmful light and smog. Such protective measures are taken to insure their continued survival for future generations. Qualified researchers, graduate students, and visiting museum scholars utilize our collections in storage, publish their findings, and thereby increase knowledge in the field. Furthermore, such research has wider implications in analyzing culture change and solving contemporary social problems. With this end in mind we continually strive to collect artifacts to reflect the total history of human cultures.

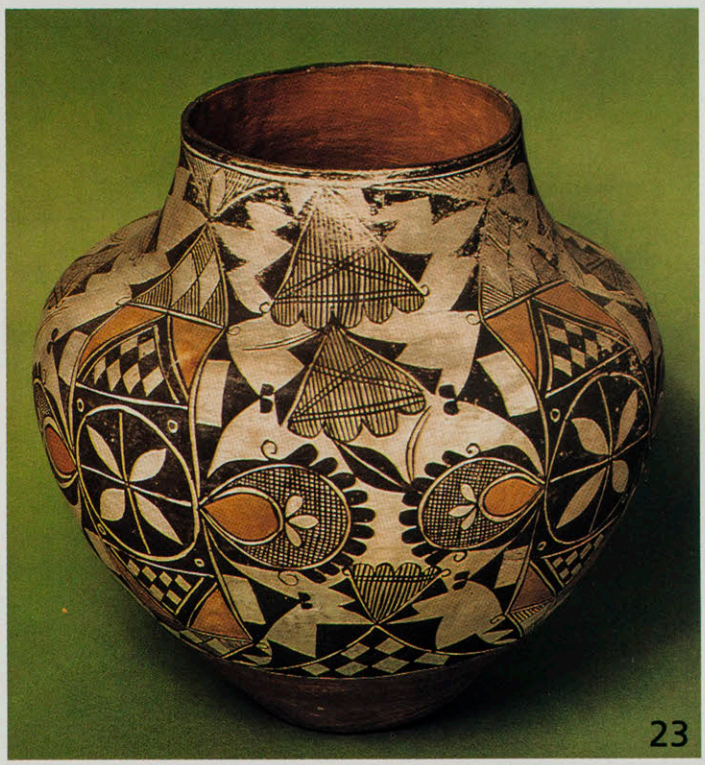
One of the lesser known areas of the study collections, but one of the largest, is the basketry collection totalling nearly 4,000 specimens. Cultures the world over are represented, with the greatest number being from western North America. Many exceptional pieces are included, from the finely twined weaving of the Aleut and Tlingit in the North, to the artistic coiling of the Chumash and Panamints in the South.

In 1942, William Randolph Hearst donated his collection of over 200 Navaho textiles to the Museum. Composed mostly of early classic blankets, this impressive collection was assembled by Hearst with the expert help of Herman Schweizer of the Fred Harvey Company. A staff research project in progress involves analyzing these pieces as to weave, yarns, dyes, and design with the objective of publication in catalogue form. Two recent large donations of turn-of-the-century rugs and more recent contemporary pieces have rounded out the collection to provide us with a complete picture of the development of Navaho weaving for the past century and a half.

22 **Plains Indian.** **Proud and appearance-conscious, Plains tribes wore clothing made from soft deer and elk skins. It was originally ornamented with porcupine quills but in later years the Indians preferred colorful glass beads.**

23 **Acoma pot.** **The spectacular pottery of the Pueblo Indians of the southwestern United States is exemplified by this beautiful pottery jar produced in Acoma Pueblo, New Mexico, sometime around the turn of this century. The Museum has a strong research collection, as well as several world famous pieces (including this one) on permanent display.**

24 **Navaho weaving.** **Examples of Navaho weaving and the method by which the superb blankets and rugs were woven form part of the extensive display in the Hall of Western American Indians. Note loom on the left.**



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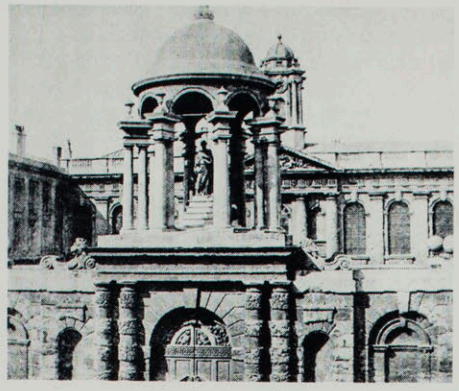
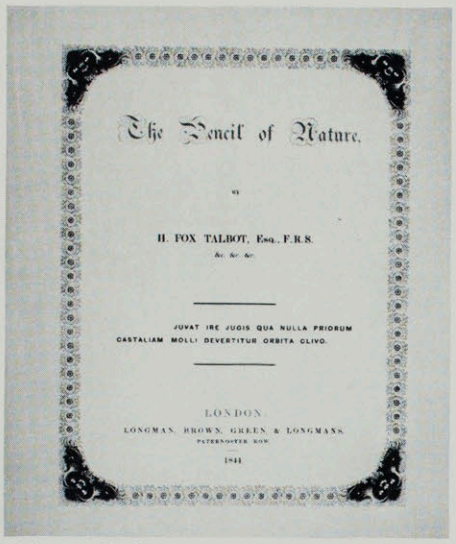
GROUND FLOOR

Part of our automobile collection is currently on display in the Ground Floor gallery, "Art of the Automobile, 1900–1930." Interesting and unusual antique autos are displayed, most of which have been restored to their original dazzling glory. With the cars are examples of early advertising art, photographic views, artistic interpretations, and trophies from early races and rallies. The exhibit opened in October 1976 and is permanent; changes and additions are made every few months.

Maris Pacifici, 1589. This is a fine example of the work of mapmaker Abraham Ortelius. It shows the discoveries made along the California coast and in the southwest Pacific. Note the drawing of Magellan's *Victoria*, first ship to have circumnavigated the globe. Maps and prints—lithographs, engravings, and etchings—are among the most interesting and varied iconographic materials to be found in the History Division Archives.





The Pencil of Nature, 1844. This portfolio publication by William Henry Fox Talbot is part of a collection illustrating the work of this pioneer photographer, who made successful photographic prints on paper some time before the public announcement of the Daguerre process. Talbot's discovery of the latent image (1840) became the foundation for modern photography. The Talbot collection is one of thousands of rare and interesting items in the Museum's Photographic Archives.

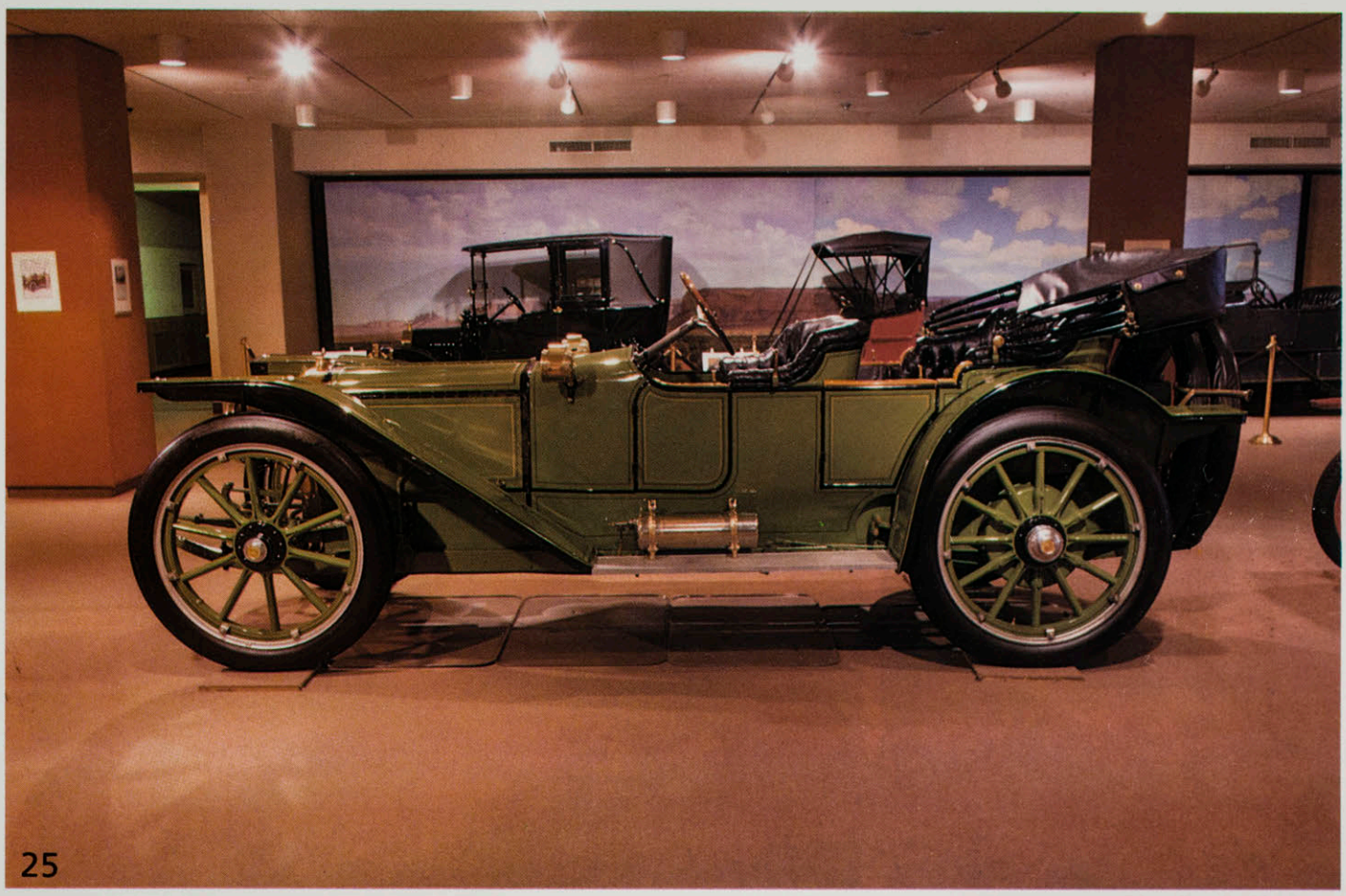
The New Zealand Cross. This is the rarest medal in our impressive collection of orders, medals, and decorations. In addition to this cross, the Victoria Cross, and other major British decorations, the collection includes several thousand medals and decorations from the United States and all over the world.

Doll. Thousands of dolls make up a collection recently more than doubled in size. Some were used originally as playthings, others as fashion models, souvenirs, or decorative ornaments. All serve now as a record of the skill and artistry with which they were made, whether by professional dollmakers or by loving parents doing the best job possible with crude techniques and tools. Dolls illustrate the way people have seen themselves or have idealized themselves in the past. We hope to display large portions of the doll collection some day.

Three of the most interesting items in our rich collection of political memorabilia are the gold watch chain presented to President Lincoln by citizens of California, a commemorative copy of the Emancipation Proclamation engraved and printed in San Francisco and later signed by Lincoln, and a wooden axe handle bearing the inscription "A. Lincoln."

25 1911 American Traveler. Most recently restored vehicle in the Museum's collection, the Traveler features an "underslung" chassis, which lowers the center of gravity and improves stability, while retaining most of the handling advantages of large wheels.

26 1909 Model T Ford. This Model T is the newest addition to our collection of more than fifty historic automobiles. This Ford is number 714; a fine companion piece is our number 77 drive train assembly for the same model car, the earliest Model T engine to survive. The Model T was almost a synonym for the automotive revolution that brought such vast changes to American society.



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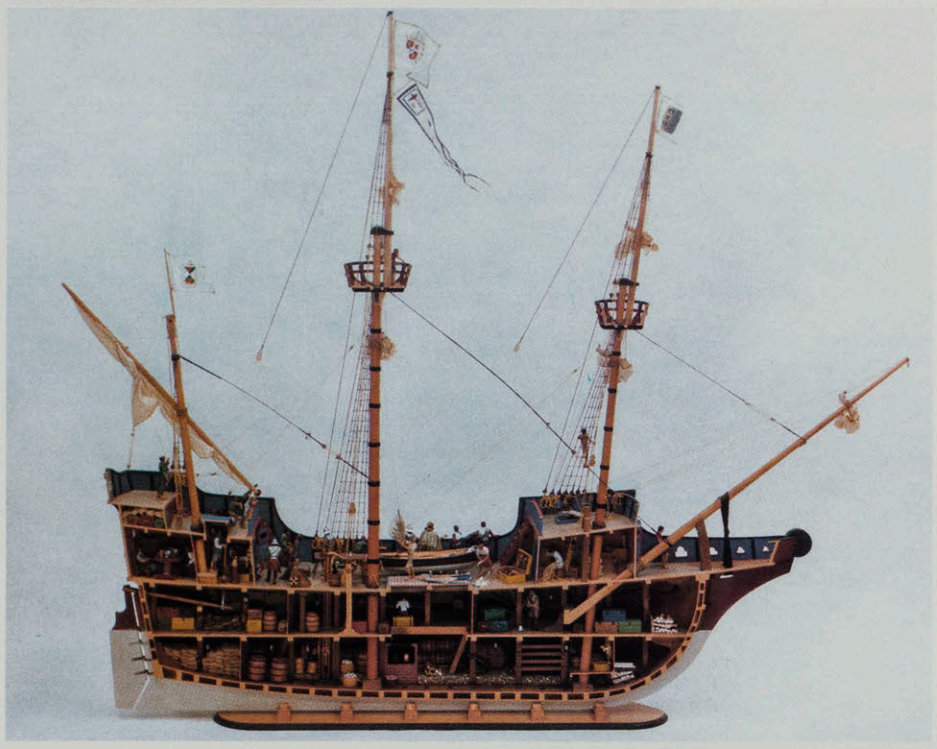
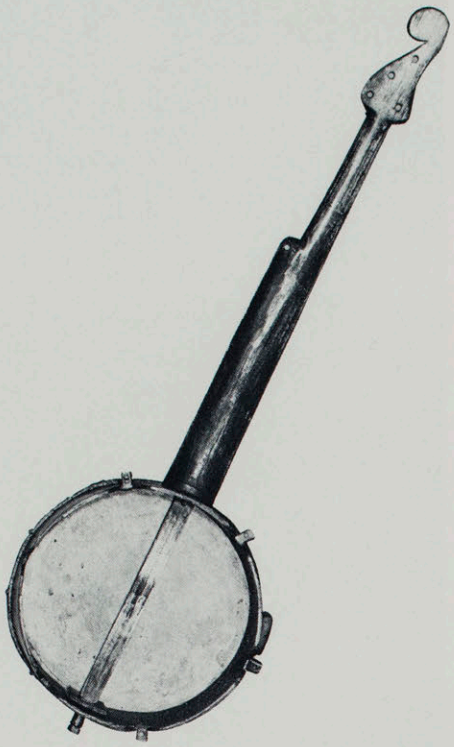
GROUND FLOOR



A model of the San Salvador. In 1542 Juan Rodriguez Cabrillo brought the first Spanish fleet to the coast of California. His flagship was a three-masted galleon of perhaps two hundred tons. It was built in Guatemala, largely with Indian labor, though most of the sails and fittings came from Europe. It carried a small but competent crew of sailors, soldiers, clergy, and Indian slaves, with equipment and supplies sufficient to support a voyage of two or three years. The commander hoped to reach China and the spice country, but after he died in an Indian battle on one of the Channel Islands, his fleet returned to Mexico. This model, constructed in the Museum, will be seen in Lando Hall.

Mexican Period Clothing. Andrés Pico's jacket will be included in the Lando Hall. Clothing from the Mexican period in California in the Museum collections is the largest assortment of this material to be found anywhere. The flounced dresses, skirts, silk-striped *rebosos*, colorful *serapes*, *botas*, silver-studded capes, and other clothing of the *californios* are tangible documentation of the past.

Movie memorabilia. Hollywood has had its special influence in the development of Los Angeles; the world of film holds a niche in almost everyone's imagination. The Museum's movie collection includes props, costumes, posters, cameras, and sound equipment. The magic and mystique of the illusion of films is represented by Lon Chaney's make-up kit and the wax head upon which he practiced his special make-up effects. The kit, the head, and Mr. Chaney's costume from *The Penalty* will be displayed as part of the Movie Section of the new Lando Hall.



The Sweeney banjo. In the History Division collections is the oldest extant example of the banjo. This unique and popular American contribution to folk and country music was invented, or developed, by Joel Walker Sweeney, a blackface minstrel performer. In about 1831, he adapted the gourd shell banjo by creating a wooden frame, covered with skin and enlarged in range by the addition of a fifth, or thumb string. The banjo, said to be the one musical instrument of American origin, was popularized by Sweeney in his lifetime to such an extent that it is familiar to all today. The original banjo in Museum collections is an important and valuable object from the American past.

27 **San Gabriel Mission painting, 1890's.** **This painting by Edwin Deakin is one of a set of twenty-one mission paintings on display in several of our Museum galleries. Deakin was inspired by the architectural beauty of the missions built in the Spanish period. His study sketches (which are in the Archives) and the paintings were added to the permanent collections in 1959. These grand canvases are a much-admired pictorial record of the missions before twentieth-century restoration. Some of these Southern California mission paintings will hang in the Lando Hall.**

28 **Eagle, 1850's.** **Originally used as a decorative device on one of the sailing ships bringing gold seekers to California, this carved wooden eagle was later used as a decoration over the front entrance of the California State Capitol in Benicia. It is an outstanding example of American nineteenth century woodcarver's craft, and is to be displayed in the Lando Hall.**

29 **Carreta, 1800's.** **This type of wooden cart was once in common use throughout the Spanish regions of the American West. This particular cart was made in New Mexico and is perhaps the earliest such vehicle still in existence. It is shown on its platform in the Lando Hall of California and Southwest History, to be opened in 1979 on the Ground Floor.**

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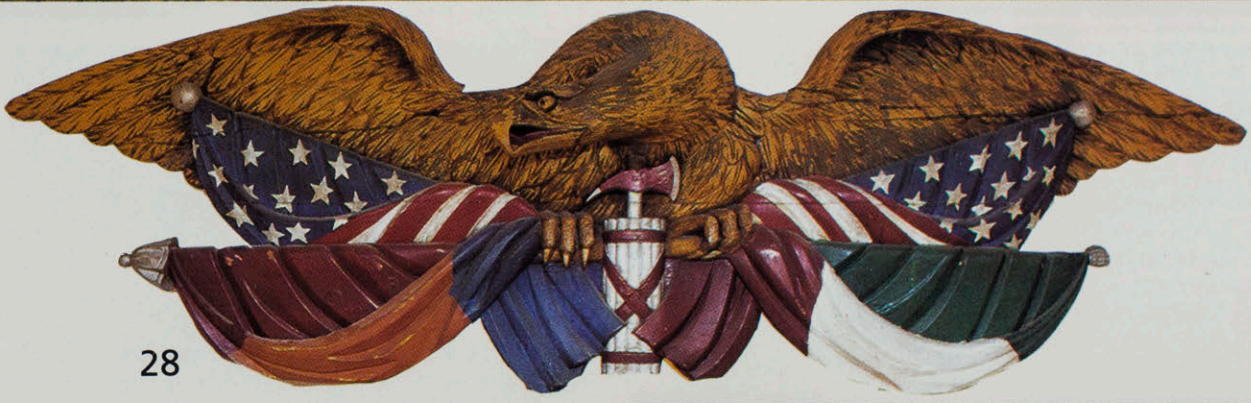

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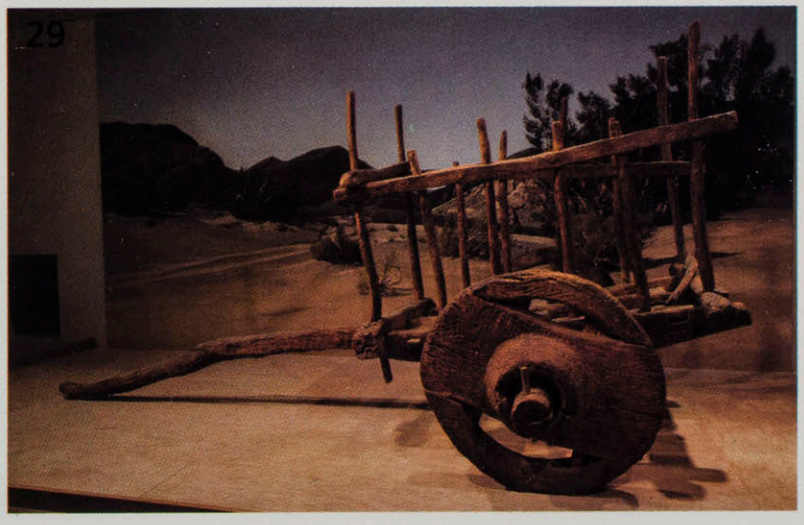

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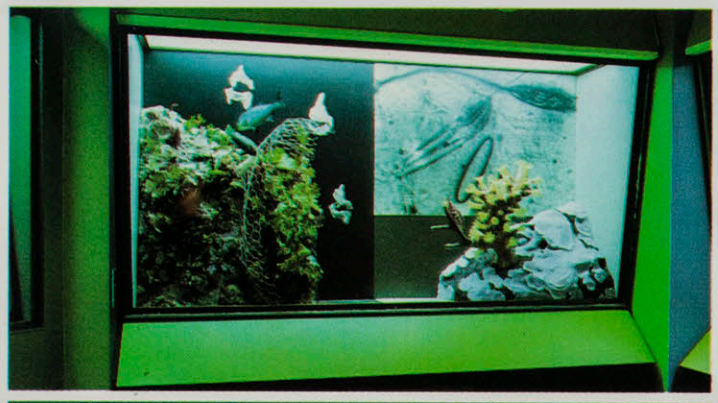
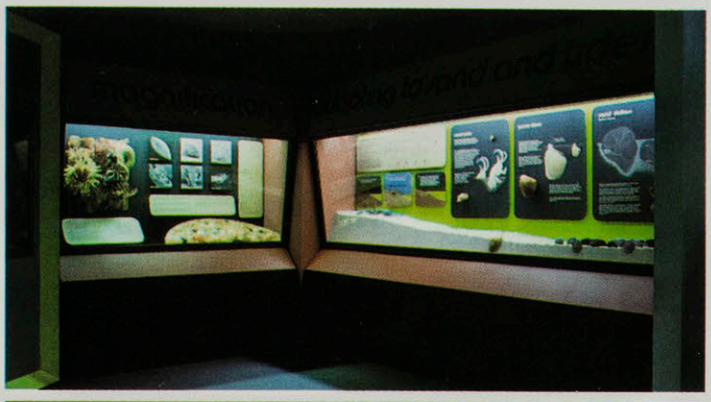
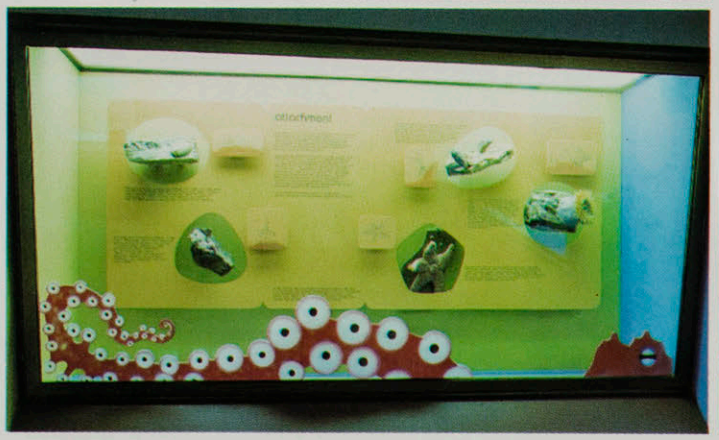
SECOND FLOOR







Feeding. Marine organisms from the mud-eaters to the great predators feed in an unbelievable number of ways. This display explores food and feeding.

Attachment. Only those marine plants and animals that have developed special methods for attaching themselves to rocky surfaces can withstand the constant impact of crashing waves.

Magnification. Tiny forms of marine life are magnified so that they may be seen by the viewer. The stunning 15-times-actual-size model from this display emphasizes the tiny marine creatures.

Marine Terrain. This exhibit explains marine tectonics, water circulation, and currents.

The spectacular Marine Life Hall is the most public aspect of the Ichthyology Section. The collection of fishes, which is not on public view, has been ranked as the sixth most important in the U.S. and the most rapidly growing one, representing especially fishes from the eastern Pacific corridor, the Antarctic, and the deepsea realm. The staff has contributed towards establishing an extensive osteological collection. These bones of fishes are essential to confirm identification of fossil fishes, and to identify fish remains in the refuse heaps of early man. Thus, our collections serve a broad user community, including palaeontologists and anthropologists, as well as ichthyologists.

The sectional research programs include osteology and evolution of recent and fossil percoid fishes from Florida, Oregon, and California; archaeological fish remains from Florida, California, and Pakistan; fossil freshwater fishes from the Rancho La Brea deposit; zoogeography of freshwater fishes of the southeastern United States; and biology and distribution of freshwater fishes of southern California. Further, systematic studies of the fishes in the eastern Pacific corridor, their evolution and biogeographic analysis help understand current ichthyo-conditions as well as to unravel the past history of fishes in this oceanic area. We hope these studies will allow possible projections for the future.

30 **Offshore Reef Diorama.** **This diorama is based on Farnsworth Bank, Catalina Island. The ocean is like a circulatory system for the reef and its creatures. The animals on the reef are unable to move; they depend on water to support them.**

31 **White Shark model.** **The White Shark, wide-ranging predator, hovers ominously over visitors to the Marine Hall, who will see that the ceiling portrays the view of waves as seen from under water.**

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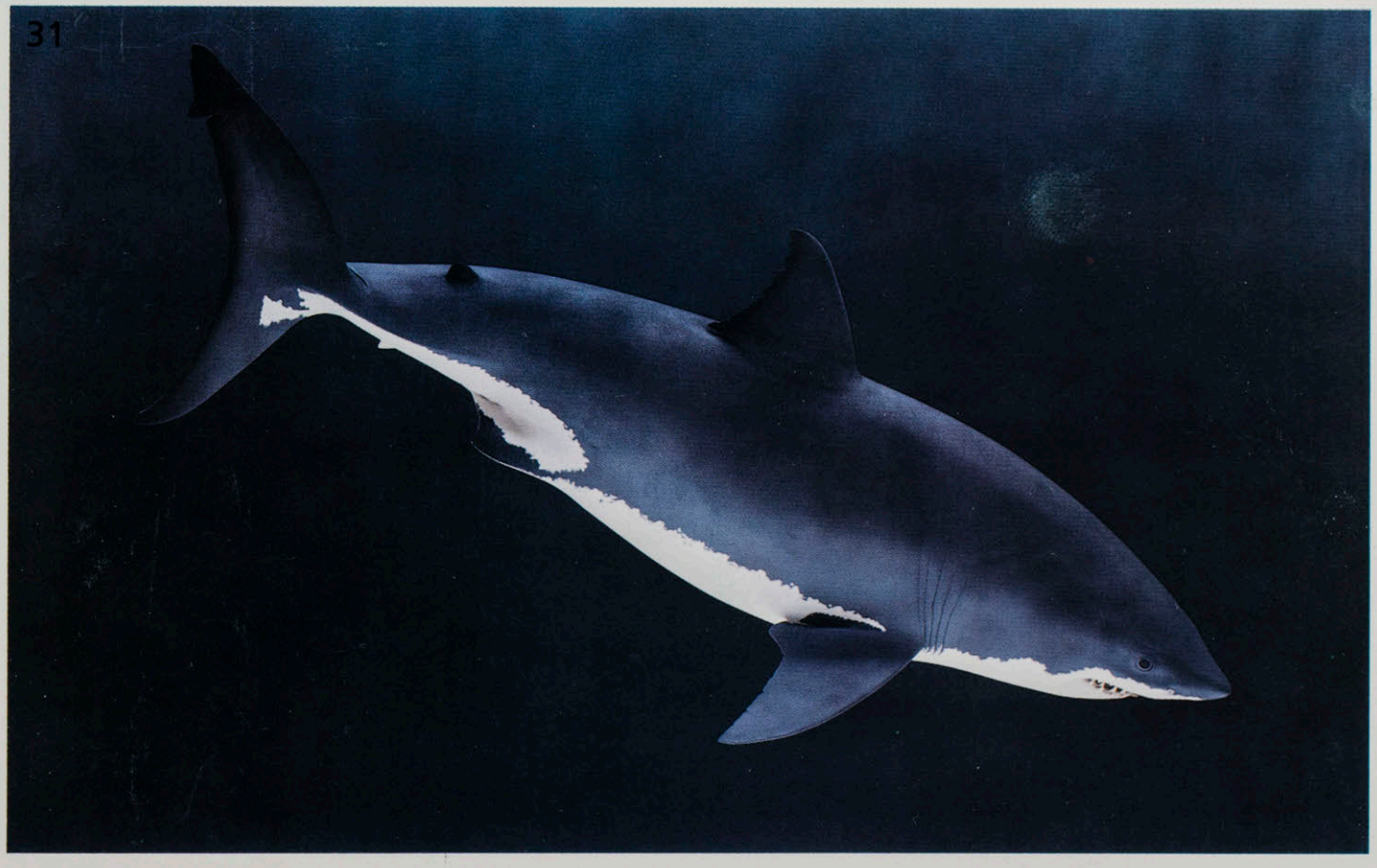


SECOND FLOOR

In recent years appreciation of the arts of Africa has taken on new significance among Americans of African and non-African descent. The collections of Ethnology at the Natural History Museum have, since the beginnings of this institution, contained rare and important artifacts from the sub-Saharan regions of the great African continent. Objects collected in the early part of this century, once considered of anthropological curiosity only, now are recognized as the cornerstones of primitive art and an inspiration to many of the world's outstanding painters and sculptors; Picasso, Modigliani and Braque are but a few.

In 1889, William Stamps Cherry, famed African explorer, was part of a French government expedition to the Congo searching for an outlet for their African territory on the Nile. This first expedition by Mr. Cherry led to a life-long interest in Africa and its people. Concentrating on the Congo, Cherry documented life on the Upper Kittu River regions. Much of the material he collected was on display at the World's Columbian Exposition of 1893 in Chicago before being donated to LACMNH. Composed of over 500 artifacts collected prior to extensive Western contact, it is a collection of tremendous significance.

In the years since 1910, many fine specimens of African art have been acquired by the Natural History Museum and the collections represent a major cultural resource in Southern California. An exceptional exhibit of *West African Tribal Art* is currently on display and includes significant ceremonial as well as utilitarian art from the African west coast.

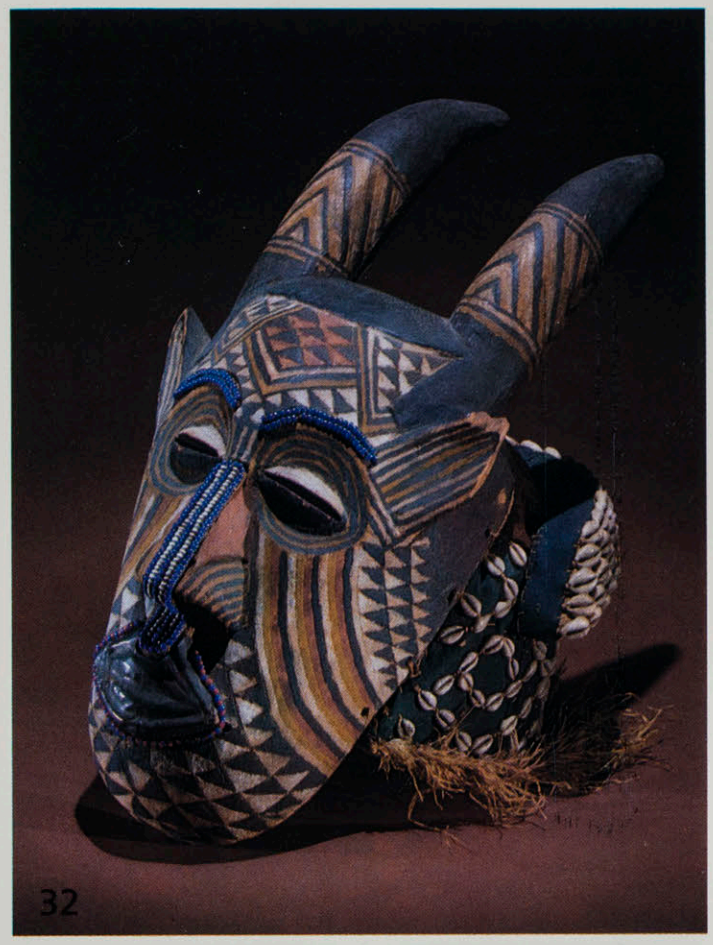
Several African exhibitions of international significance have been held here in recent years. The premiere collection of Congo Basin Art in this country was to be highlighted in a two-month exhibition, "A Survey of Zairian Art: The Bronson Collection," on exhibit from November 15, 1978 through January 21, 1979. Through the efforts of Los Angeles collectors, many of whom have contributed significantly to the research collections, plans are underway to develop a permanent gallery of African Arts and Ethnology and to establish the collections as a major resource for the study of African culture. We look forward to the time when the African heritage of our multicultural community will have a permanent and lasting tribute in the form of a nationally significant gallery of African Art and Ethnology.

Musical instrument case. The elaborate ceremonies developed among the tribes of West Africa usually were accompanied by music from such instruments as ivory horns, drums, and small finger pianos called *sansas*. On display outside elevators, Second Floor.

32 **Horned mask.** **This mask of light wood with trade beads, cowrie shells, sheet brass, and painted decorations was part of the initiation ceremony of the Kuba people, central Congo. It is thought that the back of the mask, decorated with a grass ruff at the neck, might be another mask, sewn on, and used for a different ceremony. Ca. 1880.**

33 **Palm wine storage vessel.** **A long-necked gourd was completely covered with trade beads and then used as a vessel to store palm wine. Note stopper in form of beaded reptilian figure. Camaroon, West Africa. Ca. 1890.**

34 **Kneeling mother with child.** **This nursing mother with ritual scarification on her face represents the goddess, Oya, one of the wives of Shango, God of Thunder and Rain. Yoruba, Nigeria. Mid-1800's.**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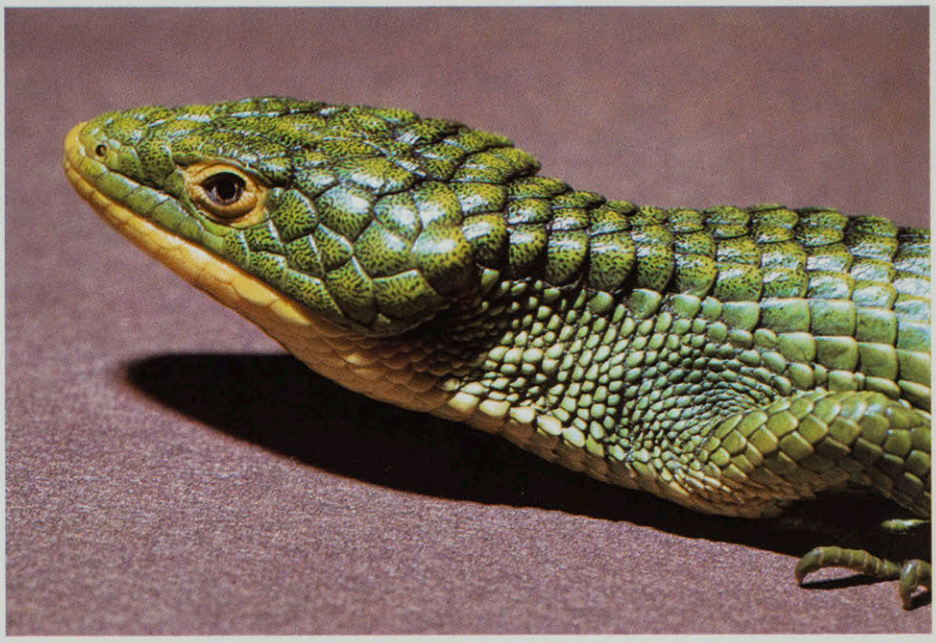
SECOND FLOOR

The Herpetology Section has built and maintains one of the ten largest collections of amphibians and reptiles in the country, although it is the youngest of all such major collections. There are over 127,000 specimens in the main collection. These, and the library of over 16,000 items, are available to students and researchers, as are the collections of chromosomal slides, frozen tissues, osteological preparations, field notes, and photographs.

Current staff research focuses on New World reptiles and amphibians, but also includes Africa and may well extend to Australia and China in the future. The primary goal of field work by the staff is for research directed at unraveling the evolutionary relationships of selected groups. In addition to the study of living and preserved animals, data from biochemistry, cytogenetics, morphology, biogeography, ecology, and behavior are useful to this task.

Although there is not yet a formal exhibit program for Herpetology at the Museum, twenty-three species of amphibians and reptiles are represented in fourteen exhibits; there are, of course, countless other items and specimens that should be on exhibit, if space and funds were available.



Arboreal Alligator Lizard (Abronia taeniata). This lizard hails from the Cloud Forest of southern Mexico. This species has blue eyes, is live-bearing and has prehensile tails. It measures approximately nine inches from nose to tip of tail.

The Malacology Section exhibits hundreds of rare and beautiful shells; in the collection not on display there are over 250,000 specimens, with 10,000 added annually. The importance of the collection is its thoroughness of coverage; it is the largest reference collection, for instance, of eastern Pacific mollusks that range from Alaska to Chile, and the collection is also particularly strong in microscopic-sized specimens.

Microscopic shells. The shells in the photograph are all very tiny—the field is about one inch by two inches and these are picked from sand grains in a complex process of screening and sorting of different sized sand fractions.

35 Tiger—Panthera tigris. **In the late afternoon a tiger stalks in the Assam forest of India near the Himalayas. Tigers need vegetative cover, water, and plenty of prey; their formerly wide range has shrunk to pockets of forest in China, India, Malaysia, Sumatra, Java, and Bali. On display in Hall of Exotic Mammals.**

36 Stone's Sheep—Ovis dalli stonei (Allen). **A group of Stone's Sheep stand in rugged mountain country near the Prophet River and Chadwick Mountain in northern British Columbia in a Canadian autumn. These sheep, which are a dark-colored subspecies of white, or Dall's, sheep range from British Columbia to the Yukon. The bird is a Willow Ptarmigan, whose feathers are white in winter and brown in summer.**

37 Black Bear—Euarctos americanus. **On a spring morning in Yosemite Valley, a black bear and her cubs amble and play in lakeside flowers, Half Dome on the horizon. Black bears are omnivorous, eating roots, fruits, nuts, grasses, insects, fish, rodents and occasionally larger animals like small deer. The black bear is found in unpopulated areas of North America (except desert regions) south of the Arctic Circle to the Mexican plateau. They can be black, chocolate brown, and cinnamon.**

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SECOND FLOOR

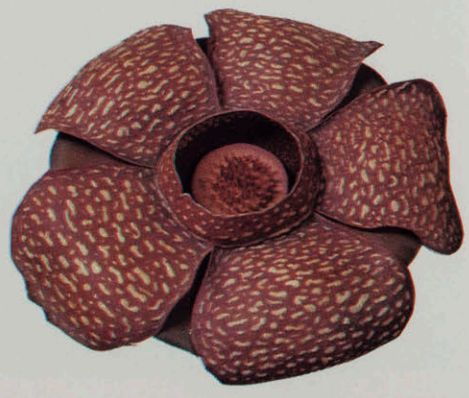
The Ornithology Section holds the most comprehensive worldwide representation of birds of any museum west of Chicago. Apart from curating the 85,000 bird study skins, 6,000 skeletons, and the fine exhibits in the Ornithology Hall and Second Floor Changing Gallery, the section is active in many studies of practical application. One study concerns the biology of the avian Order Pelecaniformes, which includes the endangered Brown Pelican.

Study of the Museum's collection of pelican eggs contributed to determining the effects of pesticides (DDT) on egg shell thinning. This study was of critical importance in helping to determine that wild birds are highly susceptible to pollution of our environment and that they serve as sensitive indicators of environmental quality. Other studies include the biosystematics of birds of Pacific islands and activities that might help to preserve the California Condor.

Waterfowl from the Douglas E. Miller Collection of Carved Birds. This impressive collection is on long-term loan to the Museum. On display.

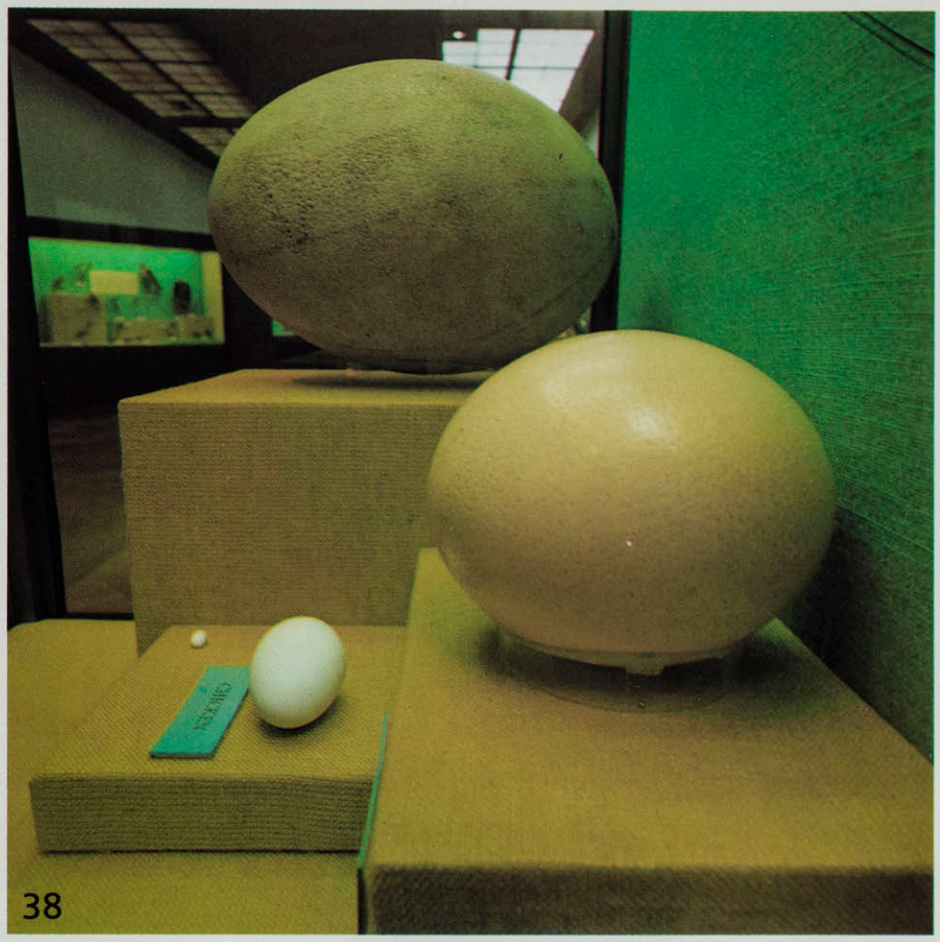
The Botany Section curates several noteworthy collections, such as plants of the Channel Islands, the Juan Fernandez Islands off the coast of Chile, and over 12,000 lichen specimens. Botanists in the section have done extensive field work on the flora of Bolivia and other South and Central American countries, on Hawaiian rare and endangered species, and on sooty molds. The section has presented a number of art and photographic exhibits, most recently one on miniflowers of the desert. A Hall of Botany to be located on the second floor is in the planning stage. Meanwhile, the Botany Section maintains a temporary gallery north of the elevators on the Second Floor.

Model of the world's largest flower, Rafflesia arnoldii. This life-sized model is three feet in diameter and made of fibre-glass. *Rafflesia* is a parasite endemic to Borneo, Sumatra, and surrounding islands. The smallest flower in the world is of the same family. The model will be on display one day in the Hall of Botany.



38 **Largest known bird egg.** **The bird egg is perhaps best known from the breakfast table. The egg shell from one of those chicken eggs is on display along with three other remarkable eggs in the Ornithology Hall: The egg of the extinct "Elephant Bird" from Madagascar measures 9 x 12 inches and holds more than two gallons of fluid. That egg is the largest known bird egg and it weighs more than nine kg. The largest living bird egg is laid by the African Ostrich and it weighs 1.5 kg. The smallest egg is that of a hummingbird, the egg weighing less then 0.5 grams.**

39 **Extinct birds.** **The present Ornithology Hall seen through the display of extinct birds. A few people may have seen one or two of these birds alive but most of us can know what they looked like only by a visit to the Museum. The Heath Hen, Carolina Parakeet, Eskimo Curlew, Passenger Pigeon were once common but by the early 1900's mostly had disappeared; and all were extinct by 1930. The Ivory-billed Woodpecker lasted somewhat longer and a few may still be alive. The flightless Great Auk was extinct by the mid-1800's. All were either slaughtered for food or sport, or their habitat was ruined by man's encroachment; thus, all have become extinct at the hands of man.**



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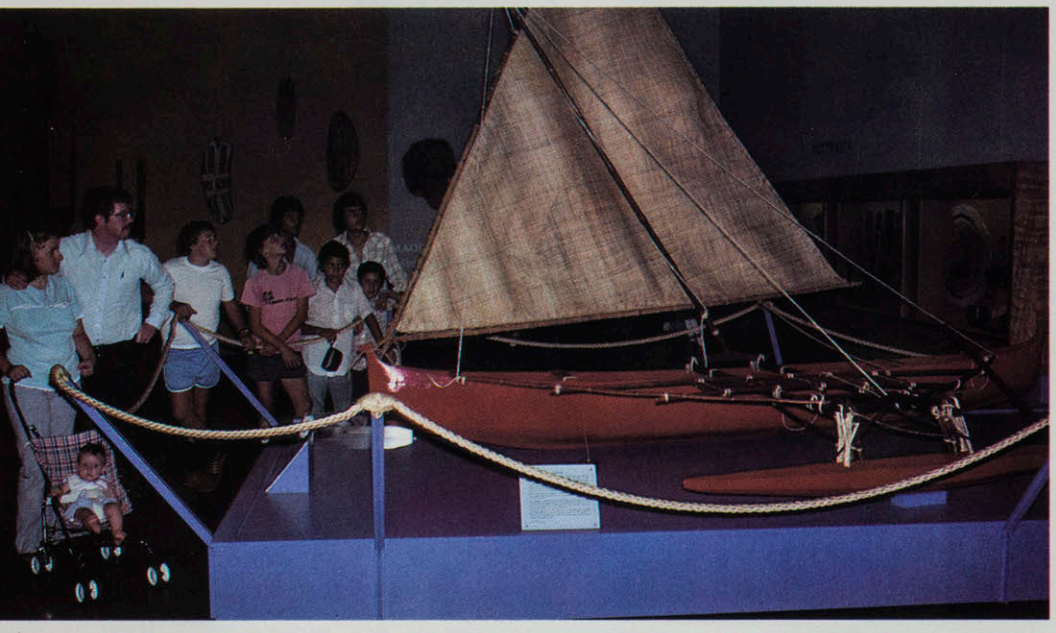
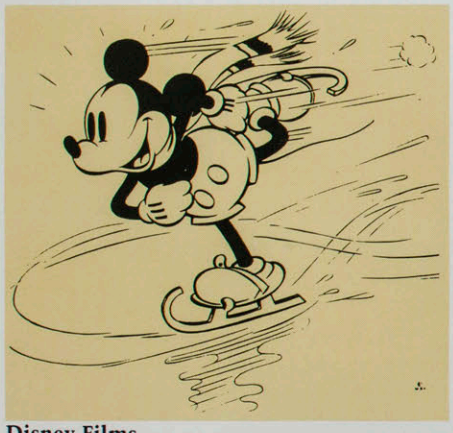
THE MUSEUM ALLIANCE IS A FAMILY AFFAIR



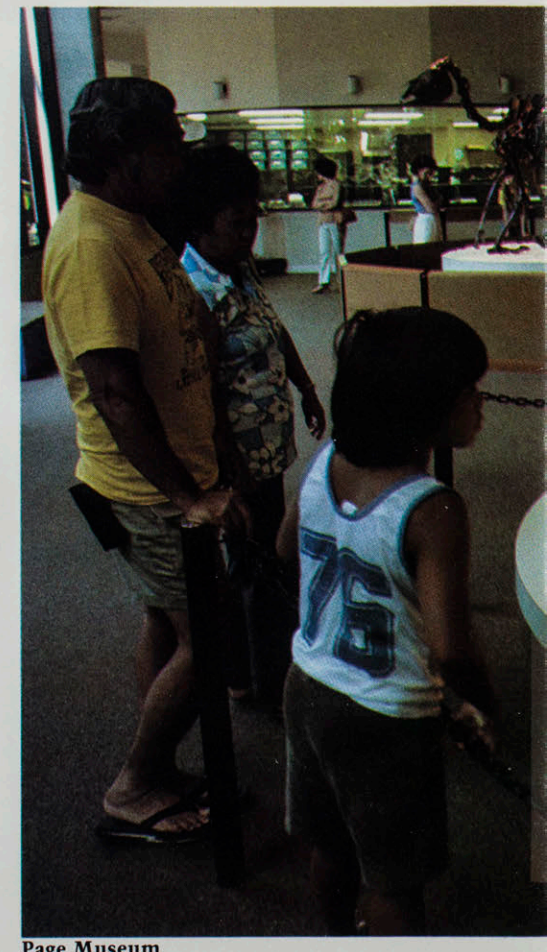
The Natural History Museum of Los Angeles County and its satellite, George C. Page Museum of LaBrea Discoveries, are the best in the West: Outstanding collections, striking displays. You and your family need the Museum and the Museum needs you. Join the Museum Alliance and we'll both grow.

Mini-trips



Disney Films

Terra Magazine



Page Museum

Preview Receptions

JOIN THE ALLIANCE AND BRING THE FAMILY FREE

MEMBERSHIP BENEFITS—GIVE A LITTLE AND YOU GET A LOT

- Unlimited free Family admission to two museums.
- Subscription to the Alliance 4-color quarterly, TERRA, national award winner.
- Monthly calendar of events.
- Discounts at all three Museum shops.
- Invitations to preview receptions for new exhibitions.
- Travel program for Alliance members only. Mini Trips to places like the High Sierra, Ghost Towns, Baja California's ancient art. And Big Trips to places like China, Mongolia and West Africa. And the usual charters to London.
- Free Disney films twice a year.
- Free film series.
- Free Sunday concerts.

I wish to apply for membership in the Museum Alliance. I understand my membership card* will admit my entire family.

☐ Student $15.00 annually

☐ Patron $100.00 annually

☐ Family $25.00 annually

☐ Life $1000 (in installments if desired)

☐ Contributing $50.00 annually

*except student

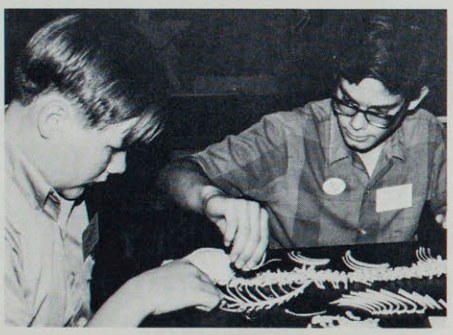
Name _____
(Two cards will be sent if registered Mr. & Mrs.)

Address _____

City _____ Zip Code _____

Ages of Children _____

EDUCATION



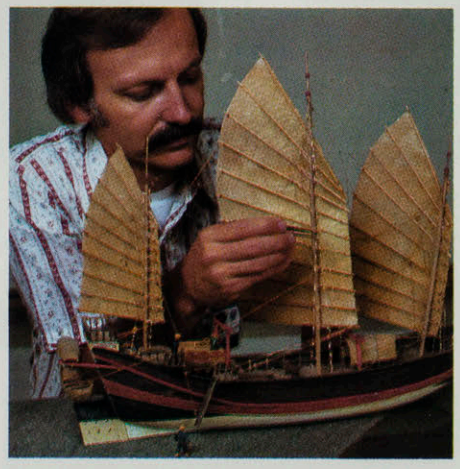
The Education Division has traditionally offered innumerable public services.

The most visible service has been the program of school tours. Three thousand school classes are scheduled for docent-guided tours through museum galleries each school year; 100,000 children are yearly shown the real animals, insects, fossils, shells, and minerals of science, and the real artifacts of history. Museum tours are excellent incitements to learning.

The Lending Service has placed 7200 museum-quality artifacts, animals, fossils, historical models, in twenty-two school districts in this county and in Orange, Riverside, San Bernardino and Ventura counties. These objects, grouped into twenty-four units of 300 items each, are made available to teachers within each school district. In addition, 30,000 items are circulated yearly to those 700 highly-motivated teachers and members of the general public who come to the museum to use the Lending Service.

The Education Division has prepared and produced audio messages for seven of the museum's halls, including North American Mammals, African Mammals, American History, Pre-Columbian Artifacts, Cenozoic Mammals, Marine Animals. Narrators' voices include Nancy (Mrs. Zubin) Mehta, Alan Young, Michael Landon, and, in Spanish, Ed Moreno.

A docent force of 200 women is organized within the Education Division to assist in touring school classes and also to give assistance in curators' laboratories

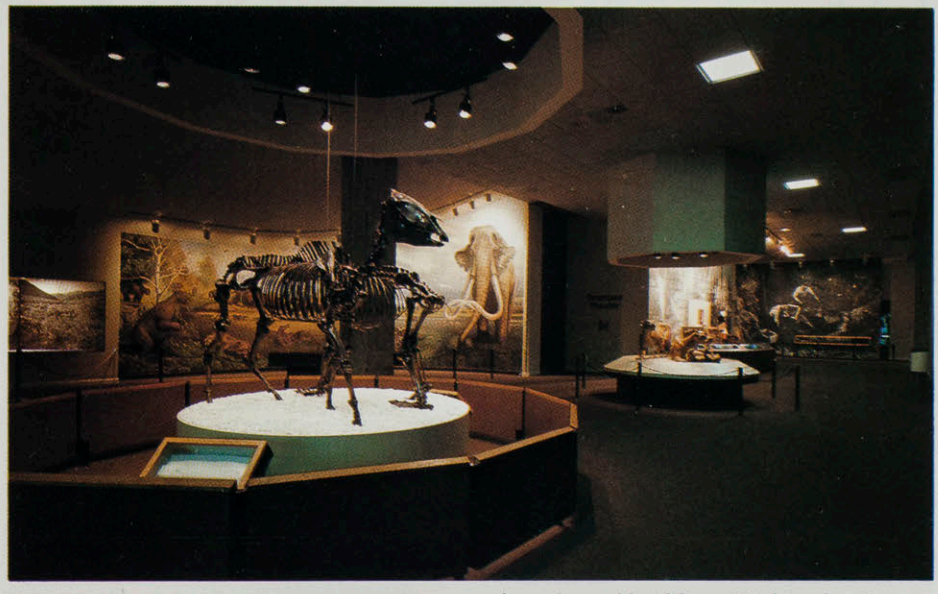


and in other activities of the Museum. These ladies receive a seven-month training, covering each of the Museum's halls. For this training they each promise two years of service; but their dedication is so high that many have remained at the Museum for ten years of service or more.

Saturday classes in science and history are given to selected, outstanding, highly-motivated high school students. A large number of the science students have gone on to pursue careers in science. The history seminar is accredited with nine colleges in the area.

The Documentary Film Circuit circulates Museum films to twenty-five libraries and colleges in Los Angeles County for free showings of Museum subjects to the public. The circuit has operated for twenty-eight years.

The Sunday Chamber Music Concerts are in their thirty-fourth year of performance. The concerts are broadcast each Sunday on KFAC-FM and present many of the fine musicians of the world who reside and work in the Los Angeles area. Mischa Dichter, Laurindo Almeida, Bernard Herrman, Franz Waxman, Roger Wagner, Darius Milhaud, John Green, Carmen Dragon, are only a few of the many luminaries who have performed on the Museum stage.



GEORGE C. PAGE MUSEUM

5801 Wilshire Blvd.
in Hancock Park

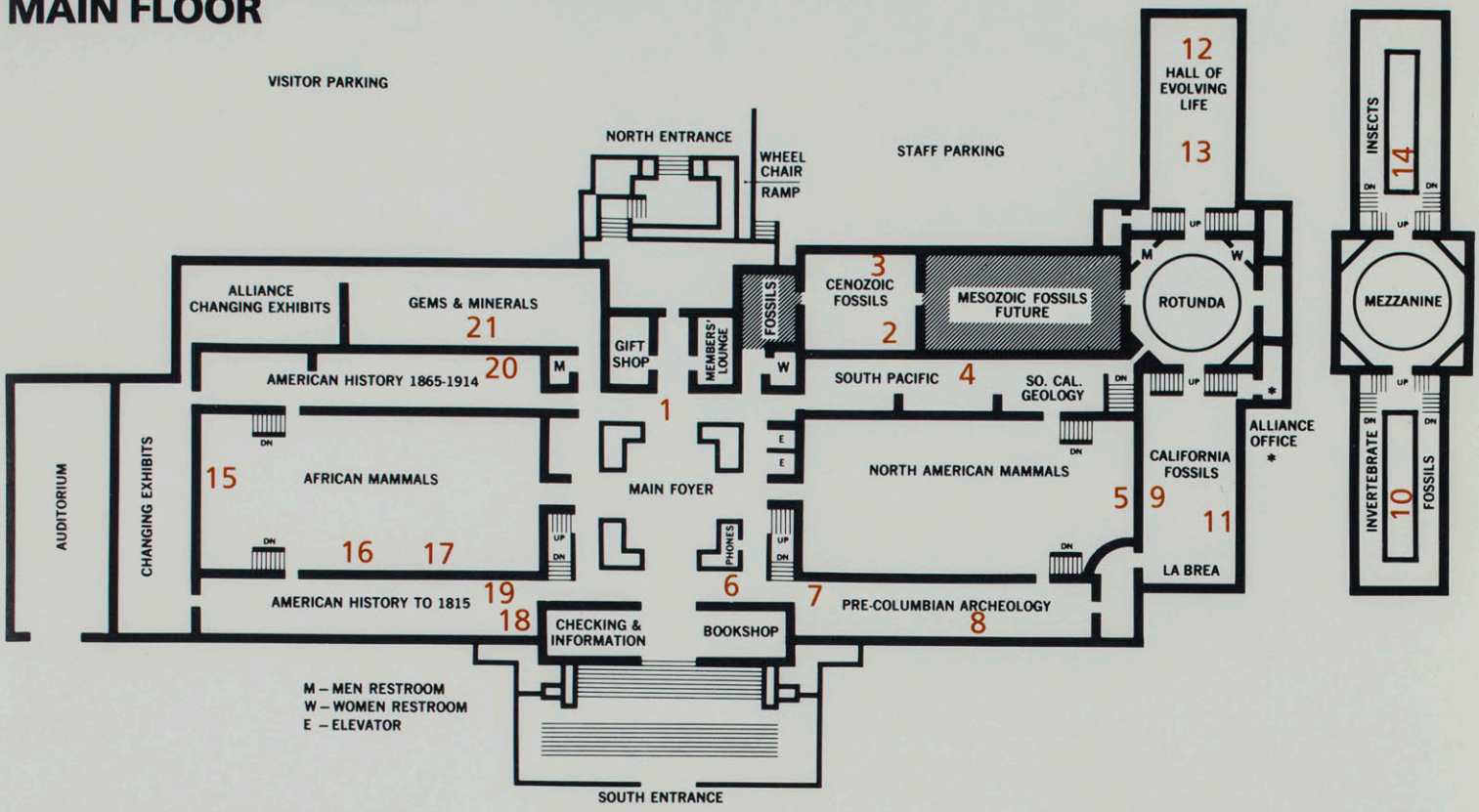
The activities of the Rancho La Brea Project constitute a unique sequence of exhibits within the George C. Page Museum, La Brea Discoveries, a satellite of the Natural History Museum located in Hancock Park. No other major museum gives the visitor a living demonstration of the activities of collecting, preparing, and curating a scientific collection. Near the west end of the park, staff volunteers are conducting a long-term paleontologic excavation at the site of Pit 91. Through the generosity of the Natural History Museum Alliance and the Prudential Insurance Company of America, visitors can view directly the excavation through windows at one end of a redwood building. Within the George C. Page Museum, they can see other staff and volunteers in the glass enclosed Paleontology Laboratory preparing and curating the fossils found in the excavation. Adjacent to the Paleontology Laboratory is an exhibit which explains the scientific activities of the Museum, from collection to storage and study. Finally, the visitor can get a glimpse of the huge fossil storage facility through a window cut into one wall. The crowds of visitors around the Paleontology Laboratory show that this living exhibit is one of the most popular in the Museum.

The unsung star of Rancho La Brea is the fossil collection. We have almost 500,000 catalogued fossil bones out of a total collection of over 1,500,000 specimens—the largest catalogued fossil vertebrate collection in the United States. It is four times larger than either of the two next largest vertebrate paleontology collections (our parent Museum and the University of California Museum of Paleontology at Berkeley).

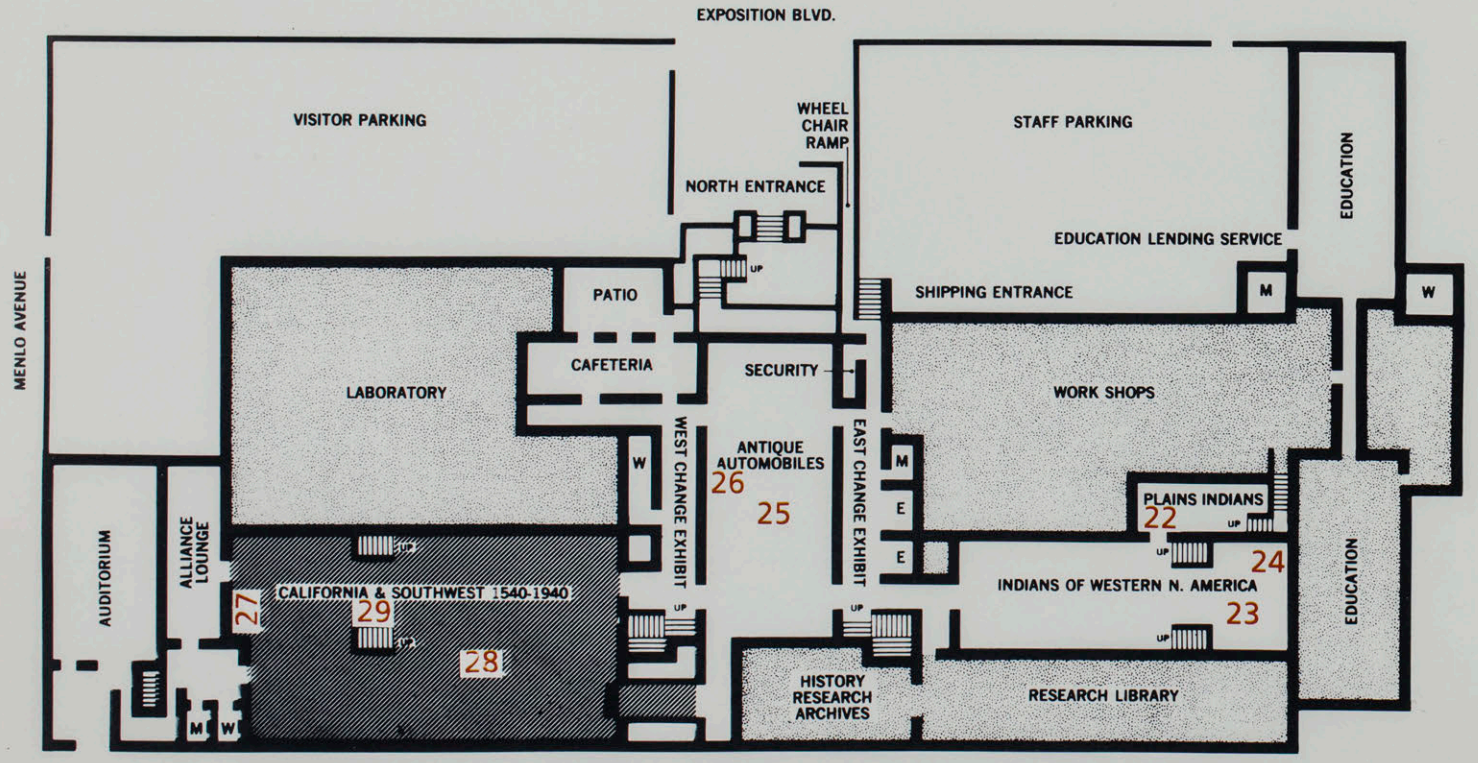
The La Brea collections fall into three categories; enormous, well documented collections of larger animals and plants made by LACM between 1913 and 1915, meticulously documented collections of all types of animals and plants made between 1969 and the present, and other poorly documented or undocumented collections. The 1913-1915 collections have the excavation number, horizontal coordinates, and depth written on the specimens. This recently became very important because we found that different levels or different excavations are of different ages, up to about 38,000 years old. Our La Brea collection is the *only* collection in the world with large numbers of fossil bones which can be dated over a 30,000 year time span. Therefore, we are the only ones who can statistically analyze small evolutionary changes in animals in a single area. This will be a landmark contribution to evolutionary theory. Preliminary studies are already showing that some changes do occur in the sabertooth cat and dire wolf at La Brea.

The more recent collections are adding enormously to our knowledge of La Brea through geologic studies, positional studies of the fossil remains, and analysis of the small fossils. We now know much more about La Brea than was known ten years ago—and we have barely begun. Most of this new information has not been published formally but it has been incorporated into many Page Museum exhibits, such as the entrapment description in the introductory film and the exhibits on paleoecology.

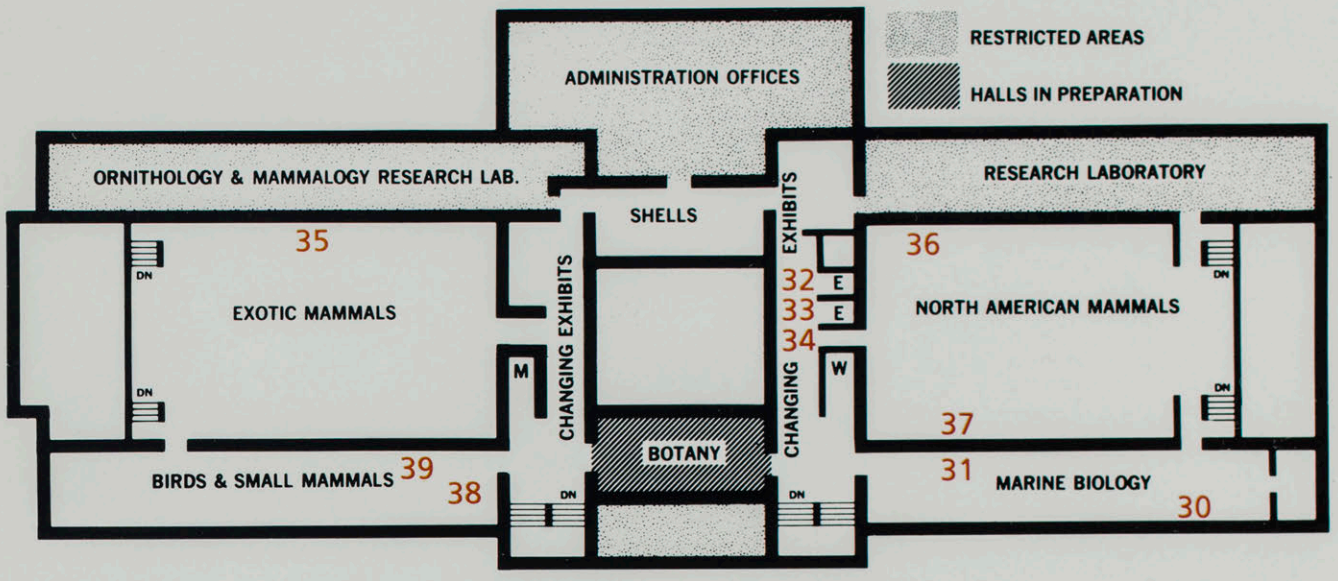
MAIN FLOOR



GROUND FLOOR



SECOND FLOOR



1 The "King" of Carnivorous Dinosaurs, Tyrannosaurus rex.

2 Giant Flightless Bird

3 Western Horse—Equus occidentalis.

4 Double-ended Micronesian outrigger canoe.

5 American Bison—Bison bison.

6 Tairona gold pendant, A.D. 1000.

7 Mayan pyramid mural.

8 Complete contents of a West Mexican tomb. 200 B.C.–A.D. 400.

9 Pliomastodon.

10 Trilobites—Homotelus bromidensis.

11 Fossil ammonite—Pachydiscus catarinae.

12 Fin Whale—Balaenoptera borealis.

13 The Panoche Hills Plesiosaur, Morenosaurus.

14 Insect Hall.

15 Elephants—Loxodonta africana.

16 Bongo —Boocercus euryceros.

17 Leopard —Panthera pardus.

18 Colonial kitchen.

19 Thomas Jefferson's clothing.

20 1889 Streetcar.

21 A view of the E. Hadley Stuart Hall of Gems and Minerals.

22 Plains Indian.

23 Acoma pot.

24 Navaho weaving.

25 1911 American Traveler.

26 1909 Model T Ford.

27 San Gabriel Mission painting, 1890's.

28 Eagle, 1850's.

29 Carreta 1800's

30 Offshore Reef Diorama.

31 White Shark model.

32 Horned mask.

33 Palm wine storage vessel.

34 Kneeling mother with child.

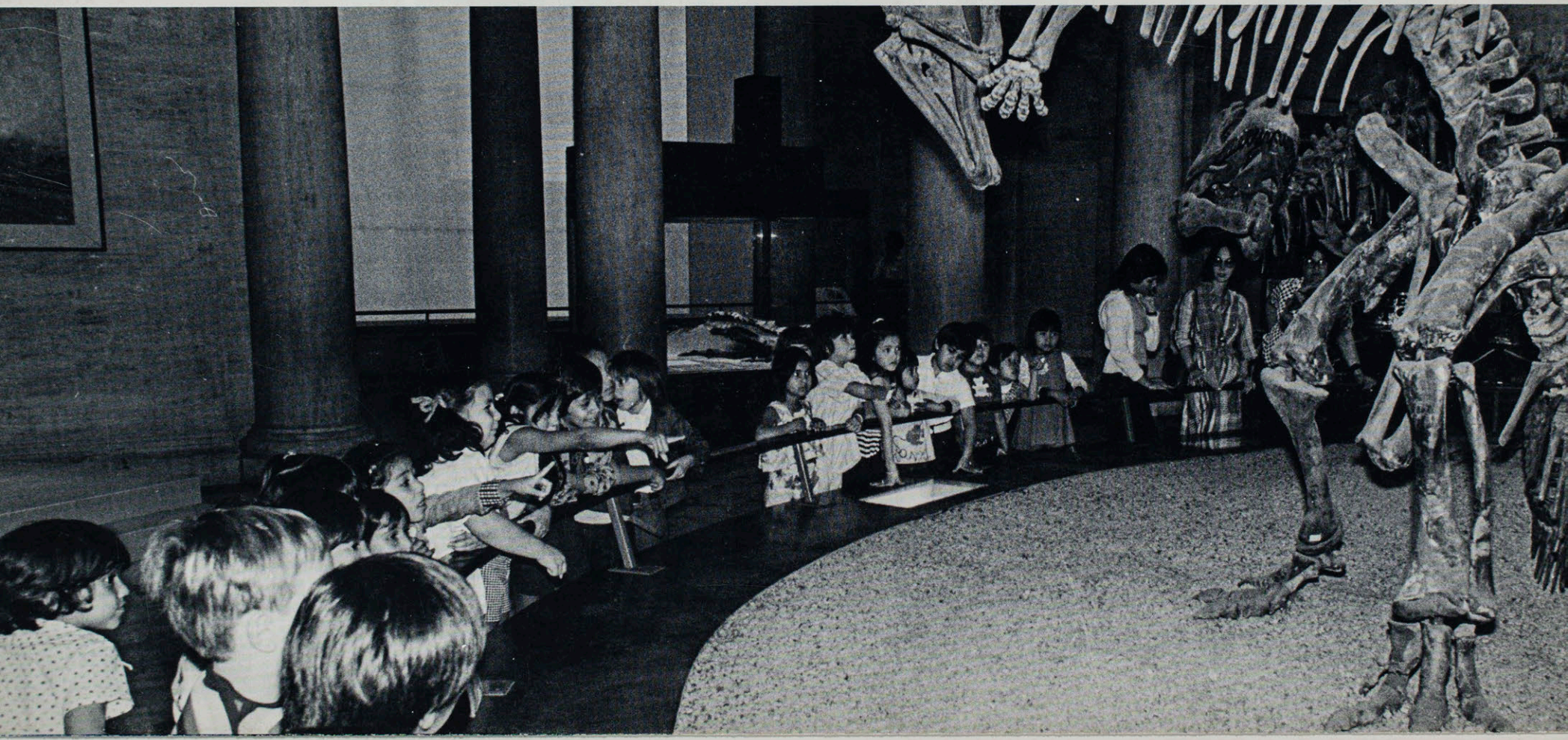
35 Tiger—Panthera tigris.

36 Stone's Sheep—Ovis dalli stonei (Allen).

37 Black Bear—Euarctos americanus.

38 Largest known bird egg.

39 Extinct birds.

Museum Visiting Hours: Tuesday through Sunday, 10 A.M. to 5 P.M.; closed Monday, Thanksgiving, and Christmas. **Entrance Fee:** Adults, $1.00, Children, 50 cents. **Members and family free.** The CAFETERIA is open daily, 10 A.M. to 4 P.M. For further information call 746-0410.

Natural History Museum of Los Angeles County
Exposition Park, Los Angeles, California 90007